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Statistics of Hours and Wages in the Principal Mining and Manufacturing Industries, including Building and Construction, and in Agriculture

Sixth Item on the Agenda



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GENERAL INTRODUCTION

The question of statistics of hours of work and wages in the principal mining and manufacturing industries, including building and construction, and agriculture, was placed on the Agenda of the Conference by the Governing Body of the International Labour Office at its Eighty-first Session (October 1937).

The possibility of inclusion of one or more questions on labour statistics on the Agenda of the Conference had previously been considered by the Governing Body at its Seventieth Session in 1935 when it decided to ask the advice of its Committee of Statistical Experts as to the possibility of including in the Agenda for the International Labour Conference of 1937 a question relating to labour statistics with a view to the adoption of a Draft Convention. This Committee met in December 1935 and surveyed the various branches of labour statistics for which the Office had been collecting information. It recommended that a Draft Convention on some branch or branches of labour statistics should be one of the subjects to be included in the Agenda of a future session of the International Labour Conference and that the subjects to be selected for first consideration should be the statistics of wages and hours of work. To this end it prepared a series of suggestions as to the points which might with advantage be included in such a Draft Convention. The Committee of Statistical Experts suggested, further, that in view of the fact that any Draft Convention which may ultimately be adopted by an International Labour Conference would have to be applied by the statistical authorities of the different countries, it might be desirable that the subject should be considered by a technical conference of official labour statisticians before being submitted to a session of the International Labour Conference. This suggestion was adopted by the Governing Body at its Seventy-eighth Session and a Technical Conference of Official Labour Statisticians met in Geneva on 27 September to 1 October 1937, which drew up proposals for a Draft Convention and a Recommendation on the statistics of wages and hours of work, in mining and manufacturing industries, including building and construction, and

in agriculture. It also unanimously expressed the view that it would be desirable for the question to be placed on the Agenda of the 1938 Session of the International Labour Conference and for a final decision to be taken by the Conference at that session.

In view of this preparatory work, both by the Committee of Statistical Experts and the Technical Conference of Labour Statisticians, the Governing Body felt that the Twenty-fourth Session of the Conference might consider whether it was not in a position to adopt international regulations at once, rather than go through the normal double-discussion procedure. A Grey-Blue Report has accordingly been prepared so as to enable the Conference to proceed by either a double or single-discussion procedure as it thought fit.

Part I of this Report is therefore designed to furnish a basis for the work of the Conference if it should decide to proceed by the usual method of double discussion and concludes with a list of the points on which the Office suggests that Governments might be consulted in the event of the Conference deciding to adhere to the double-discussion procedure. Part II is designed to enable the Conference to proceed at once to the adoption of international regulations and concludes with the texts of a proposed Draft Convention and a Draft Recommendation which the Office submits as a basis for the deliberations of the Conference.

Geneva, November 1937.

PART I

BASIS FOR A FIRST DISCUSSION

I. — INTRODUCTION

In the case of a subject such as the statistics of wages and hours, the law and practice of the different countries is mainly practice. The collection and compilation of periodical statistics of wages and hours of labour are not, as a rule, regulated by laws or regulations which in any case do not lay down in detail the methods of compilation, or of classification of the data, which are the chief objects to be aimed at in an international convention on statistics.

Since its inception, the International Labour Office has been concerned with the improvement and development of statistics of wages and hours of work. In 1923, when the Office convoked the first International Conference of Labour Statisticians, the subject of methods of compiling statistics of wages and hours of labour was selected as being one of the first subjects within the field of labour statistics which should be discussed by such Conferences. This Conference adopted a series of recommendations on the subject which were of an entirely voluntary character intending to indicate the directions in which statistics of wages might be improved in the different countries as occasion offered in order that the available information might be increased and international comparability promoted. These recommendations were transmitted to Governments for their information and guidance.

In 1931 a further International Conference of Labour Statisticians was held which discussed the best methods of improving the data collected in this enquiry and of making them more comparable. The view was expressed by certain members that the recommendations of the first International Conference of Labour Statisticians in 1923 had not proved sufficient and that other methods should be envisaged; some members, in fact, indicated that some Governments would be prepared to obtain fuller information if the other

Governments would undertake to do the same. It therefore adopted a resolution to the effect that the supply of information on wages for the purpose of enabling the Office to compile and publish internationally comparable data be placed on the Agenda of a future session of the International Labour Conference, with a view to the framing of a Convention binding the Governments which ratify it, to collect and supply the information at regular intervals.

The lack of adequate and comparable statistics of wages has also made itself felt in various directions, particularly when the Office was charged with holding special enquiries, such as those initiated by the various sessions of the International Labour Conference, into wages and conditions of work, in coal mines and in the textile and iron and steel industries, and when requests have been made to the Office from outside sources for information as to wages and hours in different industries in different countries. In particular, at the Tripartite Technical Conference on the Textile Industry held in Washington in April 1937, special attention was called to the lack of comparable data as to wages and hours of work in the different branches of the textile industry and the Conference recommended on the advice of its Committee on Statistics that a special inquiry should be held into wages and hours of work in this industry. There is no doubt that had more complete and comparable information been available at this Conference on these subjects, the discussion of the problems affecting the textile industry would have been facilitated.

This brief summary of events is an indication of the interest attaching to the compilation of comparable statistical material in this field, and of the reasons which prompted the Governing Body to take the various steps outlined above, leading up to the Technical Conference of Labour Statisticians of September-October 1937 and the placing of this item on the Agenda of the Twenty-fourth Session of the International Labour Conference.

In the following Section II the statistics of wages and hours of work in the different countries are described and analysed. Their sources, methods of compilation and the special characteristics of the different classes of statistics are discussed and a series of tabular statements is given, in which the principal features of the official statistics of the different countries are presented.¹ The first chapter

¹ This study was prepared for the International Conference of Labour Statisticians, which met in September 1937.

deals with the most usual form of wage and hours statistics, namely, those per worker, i.e. those of wage-rates and normal hours or actual earnings and hours worked. A following chapter deals with another branch of these statistics, which though not always considered part of this subject cannot be overlooked in any survey of this question, namely those relating to the aggregate wages paid per annum in various industrial branches or to wage earners as a whole. Statistics of this nature exist in many countries at the present time and are useful as a measure of changes in the purchasing power of the working class as a whole. In a final chapter are set forth the principles to be followed in the standardisation of statistics of wages and hours of work.

As these chapters consist entirely of a discussion of the various kinds of statistics and an analysis of the practice in different countries, no statistics are given of wages and hours in any country. This aspect of the subject has not, however, been neglected by the Office, which now collects and publishes the information on wages and hours compiled by the different countries, and presents and classifies it by industries and occupations in such a form as to facilitate international comparisons. The latest edition of the *Year-Book of Labour Statistics* contains a summary of the regular statistics of wages for 35 countries, covering mostly the last ten years, together with the results of various special enquiries, and it is on the basis of the information compiled for these tables that the Office has been able to prepare the tabular statements in the following chapters, analysing the practice of the different countries.

In 1924, moreover, a special enquiry into wages and normal hours in certain specified occupations was initiated by the Office. This enquiry, which is now annual, covers about 25 countries and the results are published each year in the *International Labour Review* and in the *Year-Book of Labour Statistics*.

II.—ANALYSIS OF EXISTING STATISTICS OF WAGES AND HOURS OF WORK

1. Nature of the Principal Statistics of Wages and Hours of Work per Worker

The stage of development now reached by statistics of wages and hours of work per worker differs according to country. In some countries there is comparatively abundant statistical material, covering most of the principal branches of economic activity and the principal centres or regions, and published either periodically or occasionally at more or less distant intervals. Other countries have only a few data, limited to particular occupations and published more or less regularly, sometimes at long intervals. Finally, in several countries there are no data published by official statistical services.

In the following analysis special attention is given to the statistics concerning manufacturing industries, building and construction¹ and mines, since here the statistics have in general reached a high degree of development. Next, the statistics relating to the various "services" are rapidly reviewed, for they are often comparatively undeveloped, although their methods are similar to those of the preceding statistics. Finally, an account is given of the statistics of wages in agriculture, which entail certain special problems.

This analysis is based on the material collected by the International Labour Office during the last few years. This material, although already considerable in quantity, naturally cannot claim to be absolutely complete. It is necessarily limited to the statistics which are of most importance owing to their economic and territorial scope and to the level of quality they have reached. It is also possible that some data may have escaped attention.

A.—INDUSTRIES (MANUFACTURING INCLUDING BUILDING AND CONSTRUCTION)

There can be no doubt that it is in the manufacturing and construction industries that one finds the most complete statistical

¹ In this Report, the word "industry" is used to cover the manufacturing industries, building and construction, unless otherwise stated.

material on wages and hours of work. The task of the statistician is facilitated by the standardised conditions of employment which prevail in this sphere, and which are due partly to the development of mechanisation and the concentration of the population in urban centres, and partly to the work of organisation and regulation carried on for many years by trade unions and public authorities. In this sphere, too, the demand for statistics has been strongest.

While the conditions of employment and remuneration present numerous divergences of detail as between one industry and another and as between one country and another, corresponding to the technical peculiarities and to the whole they show certain attained in each branch, yet on the whole they show certain general characteristics which distinguish them from other large groups and lend them a certain homogeneity. The pay period is, for example, relatively short, being the day, the week, and in certain countries the fortnight; whereas in agriculture and certain services some of the workers are engaged for longer periods and are often paid monthly.

On the other hand, the system of housing the worker in the employer's house, so frequent in agriculture, is practically non-existent in industry except in a few secondary branches or in certain countries where a handicraft system is still prevalent. Even the system by which the employer provides his workers with individual or collective dwellings (free or at a reduced rent) is now exceptional in many industrialised countries. Other systems of payment in kind, so prevalent in agriculture and often of importance in transport and mines, are almost negligible in industry in most countries.

As to systems of payment, they vary of course considerably, and are sometimes based on very complicated wage scales in the case of piece or job work. In contrast to the situation prevalent in many "services", however, the rates and scales are generally uniform for the adult workers of the same sex, irrespective of age or length of service, the sole exception being made in the case of young persons or those learning a trade.

Information on wages and sometimes on normal hours of work has been published for a considerable time past in the principal industrial countries, and has grown considerably since the war. Wage statistics in industry are to-day published regularly and systematically in about 30 countries, and many others publish certain information at irregular intervals. Statistics of hours of

work, generally linked up with those of wages, have been developed chiefly in the last ten years or so. Those relating to actual hours of work already cover—in a regular and systematic way—about 12 countries, including nearly all the most important countries from the industrial point of view. Statistics of normal hours of work are also regularly published in about 12 countries, not all identical however with the 12 mentioned above.

It is accordingly in the sphere of industry that the International Labour Office has made its greatest effort to obtain statistical data on wages and hours of work.

Ever since 1921 the Office has compiled tables based on the principal wage statistics available and reproducing the essential details by occupation and by industry. Appearing at first in the form of special studies, then introduced into the *International Labour Review* where since 1935 they have been supplemented by statistics of actual hours of work, this information now appears in the *Year-Book of Labour Statistics*.¹ Limited at the beginning to a few occupations or industries in about 12 countries, they now cover a large number of occupations and industries, presented in standardised form, in about 30 countries.

Further, the International Labour Office began in 1924 to collect directly from the statistical authorities of various countries wage data for certain specified occupations, and certain towns. This enquiry, at first carried out monthly and limited to 18 occupations in 14 towns, is now carried out annually and furnishes figures of wages—and (since 1932) of normal hours of work—in 30 occupations and some 80 towns in about 25 countries.² Its original purpose was to obtain comparable data for the different countries, with a view to facilitating international comparisons at any given date. In course of time, the development of national statistics has in a large measure supplemented the limited information collected by this enquiry.

Lastly, the Office has added to this necessarily selective material by making special studies, which assemble according to uniform plan and in as detailed a form as possible all available statistics of any importance relating to a particular industry. The first of these studies is devoted to the textile industry and covers 14 countries.³

¹ *Year-Book of Labour Statistics, 1937*, Sections III and IV.

² The results of the latest inquiry are given in the *International Labour Review*, March 1937, and the *Year-Book of Labour Statistics, 1937*, Section IV.

³ E.g. *International Labour Review*, September 1934; and *The World Textile Industry, Studies and Reports, Series B, No 27, Vol. II, Part IV, 1937*.

In order to show the principal characteristics of the statistics of wages and hours of work in industries, an attempt has been made to present them in a series of tabular statements. As statistics of wages and hours in mines are often compiled or published along with those of wages in industry, these tables cover also mines. The statistics of mines are however treated separately in a special sub-section of this chapter.

These tables have been compiled for each of the three main types of statistics, viz.:

Table I: Statistics of wage rates and normal hours of work.

Table II: Statistics of average earnings and actual hours of work:

- (a) Periodical statistics (published at least once a year);
- (b) Special enquiries (published occasionally, or at irregular intervals, or at intervals of more than one year).

Table III: Statistics of wages taken from social insurance statistics.

The different headings of these tables indicate the nature of the data, their economic and territorial scope, their presentation by time-unit, economic group, age and sex, and territorial unit, the method of weighting, whether information on subsidiary items of remuneration is given, the frequency with which the figures are published, and the time-lag in their publication.

It will be seen that under the heading giving the economic scope of the figures, reference is made to other economic branches than industry and mines, to which the tables mainly relate. The reason is that many series and enquiries covering the various industries also provide figures on the same basis for other branches, in particular, transport and commerce, and sometimes also public administration and agriculture. Often the general averages comprise all the branches covered by the statistics. It has therefore been thought advisable to indicate under this heading industry and mines. On the other hand, it has not been considered necessary to include in the table statistics which in their original form were limited to one or more of these branches other than industry and mines; on this point therefore the tables do not give complete information.

Also as regards industry and mines, the only statistics taken into account as a rule are those compiled by the central statistical offices of the various countries, statistics of municipalities, provinces, and States (federal countries) being left out of account; unless national statistics were lacking. Further, account has been taken only of the statistics published since 1929, the period usually covered by publications of the Office.

Sources

Statistics of wages and hours of work may therefore be divided into three main groups:

- (a) Statistics of wage rates and normal hours of work;
- (b) Statistics of earnings and of actual hours of work;
- (c) Wage statistics of social insurance schemes.

The synoptic tables show periodical statistics of wage rates for 20 countries, of which 12 also furnish information on normal hours of work. Periodical statistics of earnings are shown for about 20 countries, and statistics of actual hours of work for about 15. Special detailed enquiries into earnings are shown for 10 countries, in 5 of which the enquiries give also figures relating to actual hours of work. As regards the statistics of social insurance schemes they give information on wages per worker in only 7 countries.

(a) *Statistics of wage rates and normal hours of work* are generally obtained by an analysis of the conditions laid down in collective agreements or individual contracts of employment, in decisions of courts of arbitration or other authorities, or in legislative provisions; sometimes the rates taken are those fixed unilaterally by employers or quoted by the employment exchanges; often the statistics are compiled from several sources at once. In general, rates of wages relate exclusively to normal hours of work, though they may include also certain additional items (cost-of-living bonuses, allowances for equipment, etc.). In the majority of cases they refer only to time workers, although occasionally figures are available for piece workers, in the form of piece work basis time rates indicating what average workers working at normal speed may expect to earn, or of minima guaranteed to them by contract. Sometimes, again, the figures are in the form of percentage increases or decreases on basic wage rates, in which case they give information

only on the movement of wages and not on their absolute amount. The data of normal hours of work are taken generally from the same sources.

It is always difficult to determine the extent to which these figures are representative of actual conditions of work. It depends on the nature of the collective agreements, arbitral awards or legislative provisions in force in the various countries and industries of the workers in the branches under consideration, moreover, very variable. It is covered, a proportion that is, of the workers for which widely applied collective agreements exist are sometimes those in which conditions of remuneration are somewhat better than those of the great majority of workers. Similarly, a worker not covered by the conditions for his occupation may be employed on less favourable terms than those who are covered. It follows that the general averages computed from the rates contained in the statistics will in these cases tend to show a level of wages somewhat higher than that actually reached by the main body of workers. On the other hand, in certain industries and countries the rates published are really minimum rates, the actual rate paid being higher. The nomenclature used in different countries to indicate the kind of rates used in the statistics—standard, recognised, predominant or current, typical, minimum rates—varies very widely, as the table shows. This nomenclature does not suffice, unfortunately, to indicate the exact character of the data, for the same terms are far from having the same meaning from one country to another, or even from one occupation to another in the same country. Thus it may happen that so-called minimum rates are in reality typical rates, while so-called typical or standard rates are in reality minimum rates.

There seems to be little practical possibility of obtaining greater precision in this matter, except perhaps by indicating more clearly the cases in which the rates taken are in fact (independently of their nomenclature) minimum rates clearly inferior to those generally prevalent.

(b) *Statistics of earnings and actual hours of work* are compiled as a general rule from the payrolls of a certain number of representative undertakings. The earnings indicate the average wages actually paid (including generally all bonuses, allowances, etc.) to the workers in the branch under consideration, sometimes a distinction is made between time workers and piece workers; they usually relate to earnings for hours actually worked.

Among these statistics a distinction has been made in the tables between periodical statistics, compiled regularly each month, quarter or year, and special enquiries, carried out at irregular intervals usually longer than a year. Statistics of the first kind are generally summary, while those of the second kind, when they supplement the periodical series, usually provide more detailed information.¹ In those countries, however, where such enquiries still constitute the sole information available, they are often rather summary in character.

When less detailed statistics are compiled they take account only of the aggregate figures for each establishment, i.e. the total wages paid (in some cases, classified by sex) and the total hours or days worked or the number of workers employed in the per payroll period (week, fortnight, month), so as to obtain average earnings per hour, day, week, fortnight or month respectively. When more detailed information is required—by occupation or degree of skill, for example—the returns must give these details for each worker. From the individual statistics not only averages can be compiled, but also the distribution of wages by wage groups. Data of this kind, given in the special enquiries made in some countries, give interesting information on the conditions of remuneration of workers, which general averages alone fail to reveal.

The representative character of statistics of earnings—summary or detailed—still remains to some extent open to discussion, for the establishments selected for inclusion in the returns are often those of a certain size, well established, and with conditions of employment sometimes slightly better than those of the workers in general.

Statistics of actual hours of work are considerably less developed, for in many cases the statistics give information only on earnings. Only 11 countries out of 20 in the table of periodical statistics give figures on earnings and hours of work together, and 5 countries out of 10 in the table of special enquiries. In about 6 countries, however, information on actual hours of work is furnished by statistics of employment which are based, like statistics of earnings, on the payrolls or wage bills of a certain number of selected establishments; or again, the statistics of hours worked are drawn up independently of both these series, but on very

¹ This is particularly true of two countries: Germany and the United States.

market rates. Thus in some countries there are two series relating to hours. In the last few years interest in information on this subject has grown, and the statistical information is developing rapidly.

The data relating to long worked furnished by these various countries show either the actual hours of work or the distribution of workers by hours of work, or both. Out of 13 countries in the table following, 10 give data on hours, 7 give only the distribution of workers by hours worked, and 3 give both sets of figures. Information on the distribution of hours worked is more frequent than on distribution of earnings.

It is further to be noted that the degree of precision of these data on hours, whatever their form, may vary widely. The more exact method of obtaining a distribution of payrolls, the actual hours worked by all the workers in each establishment, and dividing these either by the total number of days worked, which gives the average hours of work per day—or by the number of workers employed for pay period fixed, fortnight or month)—will give the average hours of work per pay period. The distribution is obtained by classifying the workers of each establishment into one of the different groups according to their individual hours of work. The more rudimentary method generally provides figures relating to the distribution of workers by groups of hours, but all the workers of a single establishment, or at least of a branch or department, are taken together, each of these groups being classified according to the approximate hours during which the majority of the workers were at work or the establishment, branch or shop was in operation.¹

(c) Statistics of insured wages are obtained from data arising out of the operation of compulsory social insurance schemes, generally

¹ The distribution of hours obtained by the summary method can also be used to compute the average hours in another way, by assuming that the average for all the workers in each category corresponds to the mid-point of each hours group, and weighting these averages by the number or the proportion of workers in each group. If such an operation is to give satisfactory results, the distribution adopted must be detailed—as is not always the case. Furthermore, the actual average of hours so calculated seems to be of doubtful reliability. It may be sufficient to give an index number showing its fluctuations. Even with its limited significance such an index number will serve to supplement the data relating to distribution of hours, which are difficult to use, especially when it is desired to make comparisons in time between countries or from one period to another.

in the form of declarations made by the employers for the assessment of their contribution. In 4 cases out of the 9 examples of insured wages noted in the table—the returns show the total wages paid and the total number of days worked, from which the average daily wages can be computed. In 4 other cases the returns indicate the number of workers employed whose wages fall within certain groups; from these returns the average wage per worker can be computed theoretically, assuming that the average wages of the workers in each group correspond to the mid-point of the group and weighting these, according to the number of workers comprised in each group.

Insurance statistics generally cover almost the whole field of labour, and are therefore much wider in scope than the other two kinds of statistics. They usually include, for instance, certain classes of lower-paid workers which are often neglected in other statistics. On the other hand, existing insurance schemes generally set an upper limit above which the wage is not taken into consideration for the purposes of the insurance contribution, a part of wages is thus not covered by the statistics. These facts together generally bring the averages obtained in this way considerably below those calculated from the two other types of returns.

Use may also be made of social insurance schemes in the compilation of wage series by taking as a basis the declarations made by workers and employers for the purpose of claiming benefits (when such benefit is fixed in proportion to wages). Statistics of this kind are compiled, as far as the Office is aware, in only one country,¹ but could perhaps be developed elsewhere also.² The basis of these statistics is much more limited, being in reality a sample drawn from the whole body of insured workers. As, however, this sample is selected according to a criterion independent of wages themselves, the results obtained may be regarded as representative for each of the branches considered. The computation of general averages for all industries together requires, of course, appropriate weighting, for the simple average of the wages of all workers receiving benefits for injuries or sickness would exaggerate the importance of the more dangerous and unhealthy industries.

¹ Switzerland (Accident insurance).

² Under the Social Security Act, the United States Treasury receives at quarterly intervals and from the employers of 27 million workers information concerning actual earnings including payments in kind of these workers, data which are going to be published at an early date.

The statistics of social insurance schemes generally provide no data on hours of work.

Time Unit

The time unit at the base of these various series is generally the hour, day, week, fortnight, or month, and occasionally the year.

In the *statistics of rates*, the data are often given in terms of the units in which the rates are fixed by the collective agreements or other documents from which the figures are taken. The time unit thus varies widely as between different countries, and sometimes even as between different occupations in the same country. When the corresponding figures relating to normal hours of work are available, it is easy to convert the rates per hour into rates per normal day or week, and vice versa. On the other hand, the conversion from the day to the week is possible only when information is obtainable regarding the prevailing arrangements for the interruption of work at the week-end. As regards series relating to normal hours of work, these are generally expressed per day, week, or fortnight, according to the provisions of the agreement or other document from which the figures are taken.

In *statistics of earnings* the most usual time unit is the hour. Out of about 30 series shown in the tables covering 20 countries, there are 23 in which the figures relate to earnings per hour, of which about 10 relate exclusively to this unit; earnings per day or per week are compiled in about 15 cases, of which 10 are weekly; 4 series give only monthly earnings.

This very characteristic preponderance of the hour unit must be due to technical causes. Experience has probably shown that it was easier in some countries to obtain from the establishments furnishing information data relating to the total hours worked (necessary for the computation of earnings per hour) than uniform data relating to the number of workers employed per week (necessary for the computation of weekly earnings).

It should be noted that the expression "the number of workers employed per week" may be understood in different ways, leading to divergent results. The figures may relate to:

- (a) the number of workers working in the establishment on the day when the return was made (generally, pay-day);

- (b) the number of different workers who worked in the course of the period under consideration;
- (c) the *average* number of workers employed during the period under consideration.

It is possible that in the returns of the establishments there may be some confusion between these different definitions of the number of workers employed per week; but when the period under consideration is relatively short—the week, for instance—this confusion should not present any grave inconvenience, for the three figures, supposing that they could be determined correctly, would not differ very widely unless the labour turnover or the fluctuations from day to day were considerable as might be the case in times of bad trade. The longer the period considered, however, the greater is the possibility of divergence in these three figures.

It is for this reason that there are to-day hardly any statistics of monthly or yearly earnings. In the four cases which were mentioned above as furnishing statistics of monthly earnings, the character of these statistics is not always sufficiently exact to make it certain that they are really statistics of earnings in the technical sense used here. As to figures of annual earnings, they are found only in three countries¹ as far as the Office is aware; the meaning of the number of workers employed annually used for the determination of annual earnings corresponds to a definition falling between those mentioned above under (b) and (c).

Figures of annual earnings are published fairly frequently, it is true, in the statistics compiled, not with a view to the study of wages, as is the case with the series examined here, but rather as part of general statistics of industrial production. Some details on these statistics are given on a later page; they are of use primarily in obtaining the total sum paid in wages to all workers in the course of the year. Generally, in these statistics, the number of workers employed used for the calculation of annual wages is an average of the figures recorded at certain dates (each month or quarter). It is thus a rough average, corresponding to the conception mentioned above under c). Precisely for this reason, most of the countries publishing such average annual earnings do so only with express reservations.

¹ United States, Hungary, Sweden.

What has just been said in regard to time units in statistics of earnings naturally applies also to series relating to actual hours of work. For the same reasons, at any rate in the statistics of hours compiled by a fairly exact method, most of the figures are given per day rather than per week (the total number of days worked being more easily determined than the exact number of workers employed during the week). Figures expressed with reference to the pay period (the week, fortnight or month) are compiled with few exceptions by what we have termed the rudimentary method.

It should also be noted that in some of the special enquiries concerning earnings, particularly in two countries,¹ attempt has been made to obtain also actual normal earnings for a normal pay period. The compilation of such series, of great interest in themselves, demands so much work that very few countries have undertaken it.²

In statistics of insured wages the most usual time unit is the day, for the employers' returns of the total wages paid are generally supplemented by the total number of working days to which these wages correspond. When the average wage is computed from the distribution of the insured workers by wage group, the time unit is the same as that adopted for grouping the wages and varies from case to case. It should also be noted that these statistics might perhaps provide information on annual wages too if the number of insured workers could be suitably determined.

Industrial and Occupational Groups

This classification, in the various series depends on the nature of the source.

In the statistics of rates and of normal hours of work the series refer in the main to different occupations, for it is generally by occupations that the conditions of employment are fixed in collective agreements and other sources. In certain industries, however, these conditions are fixed uniformly for all the workers

¹ Germany, United States (the compilation of the latter series, however, has been suspended).

² In order to arrive at exact figures access must be had to individual return, regarding each worker, and those who have worked more or less than the normal hours must be eliminated. A more summary method may, of course, be considered sufficient, that of multiplying the average hourly earnings for all the workers together without distinction by the number of normal hours in the payroll period; the result thus obtained will be a little too high since the average hourly earnings include the earnings of workers having worked over-time, generally at higher rates of pay.

with a certain degree of skill (skilled, semi-skilled, unskilled), and the statistics must necessarily adopt this classification. Averages by industry are found only in the statistics of rates of 8 countries out of the 20 considered; they are compiled by taking the average of the rates for the principal occupations in each industry, usually weighted according to the importance of the occupations.

In the *statistics of earnings*, on the other hand, the data are more usually compiled by industry than by occupation, for in the first case aggregate figures for all workers in each establishment, are sufficient as against the more detailed analysis of pay sheets in the second case. For the same reasons as those given in regard to time units, periodical statistics compiled at frequent intervals generally furnish data only by industries; separate data by occupations are found in the table of periodical statistics for only 10 countries, being generally compiled at infrequent intervals (half-yearly, annually). In the special enquiries, on the contrary, such separate data are the general rule.

In *social insurance statistics* the classification corresponds to the administrative needs of the insurance scheme. In certain cases no classification is made at all and the data refer only to all insured workers together. In other cases, the classification is by industry; in others again, it is by large occupational groups, corresponding to the different occupational funds of which the national insurance scheme is composed. In this last case, since these funds, often of varying character (trade union funds, works funds, autonomous joint funds, local or national public funds) have developed in different circumstances, comprising without system or according to different systems various occupational groups, the classification does not in general correspond to any really logical plan and at best makes it possible to obtain series for a few large industrial groups.

Age and Sex

The distinction between male and female workers and between adult and young workers can be made without difficulty in the *statistics of rates*, since it is nearly always to be found in the agreements or other sources from which the data are drawn. In general, however, the figures published refer to adult workers only, and it is only in a few cases—in three or four countries—that there are separate data referring to young workers.

In *statistics of earnings* these distinctions are more difficult to draw, for they require an analysis of the payrolls; and though the

distinction by sex is relatively simple, that between adults and young workers is more complicated, for it presupposes that the age of each worker is recorded by the employer—or at least of all those whose age approximates to the limit fixed between the two categories.

Separate data for adults and young workers, or at least data limited to adults (excluding young workers entirely) are found for only 12 countries, in the table of periodical statistics, but in most of the special enquiries. In these series the distinction is also made between males and females, or the series refer to males only. But in some countries no general averages comprising adult men and women are compiled.

Most of the statistics providing data on adults provide data also on adults and young workers together, and these are the figures which are available in most countries. But here, too, there is much variety in the method of presenting the data of males and females either being given separately and also together, or separately only, or together only. None of these three methods seems to predominate clearly. Their diversity, of course, renders international comparison very difficult, though it would seem that on this point agreement ought to be attainable without great difficulty.

In the *statistics of social insurance schemes* these distinctions of sex and age are usually not made.

Territorial Unit

Territorial distinctions are sometimes a little difficult to draw in *statistics of rates*, for they depend on the scope of application of the agreements, awards and laws fixing the rates. When these are applicable to a whole country (or to whole districts), the rates are sometimes graduated according to the relative economic importance of the various towns or to the relative level of the cost of living as between one town and another, and this still further complicates the task of compiling statistics. Most statistics of rates are compiled for certain territorial subdivisions, which, however, vary considerably. In most statistics covering several towns or districts, general averages are also calculated for the whole country, but it may also happen that the area covered by these so-called national averages will differ widely for the different occupations in one and the same country, as a result of differences in the available material and in the degree of development of agreements, awards or legislative measures.

In *statistics of earnings*, on the other hand, the distinctions can usually be drawn more easily, for it is only necessary to classify the establishments considered according to the territorial units in which they are situated. The subdivisions adopted in such a case are usually districts and not towns; it is however sometimes impracticable to obtain detailed information from firms with establishments in different areas. In the *statistics of social insurance* schemes with centralised administration the same method can be used; but in the case of schemes based on a number of individual funds, the matter is extremely complicated.

Weighting

The question of the weighting of averages raises a number of theoretical and practical problems, into the details of which it is not possible to enter here. Attention may, however, be called to two fundamental aspects of the matter.

In the compilation of averages referring to a particular date, the weights are intended to assign appropriate importance simultaneously to each of the categories—industrial or occupational, territorial, age and sex—covered by the averages. Essentially, the problem consists in making these weights representative of existing conditions. On the other hand, when the data are compiled periodically with a view to comparisons in time (as is the case with most available statistics), the statistician finds himself faced with somewhat of a dilemma: either he must constantly adapt his weights to constantly changing conditions, in which case the averages will fluctuate under the influence of two factors—the movements of wages of each category and the changes in the importance of these categories; or he must adopt fixed "standard" weights, in which case the averages will express only fluctuations in the wages. In international comparisons a similar problem arises even for comparisons at a particular date: should the weights be representative of the conditions of each country, differing in consequence from one country to another, or should they be fixed at the same standard for all countries?

To compile complete statistics it would be necessary to calculate two kinds of averages, one with variable weights representative of the conditions of the country, and the other with fixed standard weights intended for comparisons in time, and perhaps a third with fixed weights based on an international standard for international

is reasonably appropriate, differences in the weights adopted do not appreciably affect the final result.

Information on Subsidiary Items of Remuneration

Information on payment for overtime is not furnished by any countries in their statistics of rates contained in the synoptic tables. This is because, although these data are generally mentioned in the texts used as sources for the statistics, their compilation would be rendered extremely complicated by the diversity of rates and scales, which vary with the kind of overtime (worked on weekdays, Sundays or holidays; night work) or its amount. On the other hand, the various bonuses or allowances accompanying ordinary wages (allowances for tools, etc. for working clothes, transport, etc.) are generally included; or, at any rate, mentioned separately in the footnotes to the tables. In statistics of earnings, as in those of social insurance, all these supplementary payments are usually contained in the averages.

Family allowances are in a special category; in some countries and certain occupations they may play an important role, while in others they are completely non-existent. In the rather infrequent cases where these allowances are mentioned in the agreements, etc., they are taken into account in the statistics of rates, which either indicate them in the footnotes to the tables or give in the tables themselves the wage rate of a married worker with a specified number of children. Statistics of earnings, like those of insurance, usually contain no information in this matter. Here, the inclusion of the allowances may depend upon the system by which they are paid—whether directly through the establishments or through the intermediary of special funds.

One would expect to find information regarding paid holidays in the statistics of rates, since they are generally stipulated in the texts used as sources for these statistics. It must be noted, however, that none of the countries covered by the synoptic table of statistics of rates mentions paid holidays. The enquiry carried out by the Office on this question in 1932 in the course of its study of wages in certain occupations has shown that, since conditions regarding holidays often vary with the workers' length of service and according to very widely diverging scales, it is very difficult to obtain data at once concise and comparable, even within a single country.

Frequency of Publication and Time-Lag

The intervals at which the *statistics of rates and earnings* (periodical series) are published vary according to the case, being monthly, quarterly, half-yearly, or annual or at longer intervals. Within the same country, the frequency may be quite different for different series. It may be said in general that of the periodical statistics of rates and earnings contained in the synoptic tables, about half are monthly or quarterly and the other half six-monthly or annual. The time-lag in publication varies from one to three months for monthly and quarterly series, and from six months to a year (occasionally a little longer) for half-yearly and annual series. The special enquiries are by definition irregular, and on account of their more detailed character require longer intervals; the intervals vary from a few months to two years.

Social insurance statistics are for the most part annual only, and the time-lag in publication is often longer than that for other wage statistics.

B. — MINES

The conditions of employment and remuneration of mine workers are somewhat special on account of the nature of the work. In coal mines, productive workers (e.g. hewers and similar occupations and assistants) are generally paid on a piece-work basis, and often on a group basis. On the other hand, foremen, engineers and many unskilled workers, both surface and underground, are usually paid time wages. The wages rates are established in order to allow for the natural conditions of each coalfield and of the various faces, and compensate for any extra exertions due to difficult or dangerous conditions or for small output due to the poorness or the peculiar difficulties of certain veins.

Moreover, certain deductions from or supplements to these basic money wages may be made. The principal deductions, apart from social insurance contributions, which are also to be found in industry, are payments for the tools, explosives and materials used, which may sometimes amount to a considerable sum, and fines for various types of misconduct and for inefficiency, particularly for the loading of "dirty coal". The supplements are chiefly allowances in kind (coal, housing, etc.) supplied by the employer free of charge or at a reduced price. Allowances for

clothing and bonuses for good attendance (usually small) exist, and in some countries family allowances.

At the present time regular statistics of wages in coal and other mines are published in 20 countries, nearly all of which are mining countries of some importance. In several of these the figures go back to the nineteenth century and the quality of the statistics reaches in general a relatively high level. In 12 countries the statistics of miners' wages are compiled quite separately from those of wages in industry; in the rest they are incorporated in a system of statistics covering wages in industry (in some cases also in transport); but even so, owing to the special conditions of work and pay in mines, the method of compiling these figures is often somewhat different from that used for industry.

To the standardisation of statistics of wages in coal mines the International Labour Office has given special attention. In pursuance of a resolution of the International Labour Conference in 1925, it made a special enquiry among the Governments of the principal coal-producing countries, in order to obtain internationally comparable figures; this enquiry was repeated on a similar plan at biennial intervals.¹

The following short analysis is intended to bring out the characteristics of miners' wage statistics in so far as they differ from other industrial wage statistics, and irrespective of whether they are published separately or incorporated with other statistics of wages and hours. The principal characteristics of the statistics of wages in mines are illustrated in summary form in the tabular statement facing page 14, which covers both statistics of mines and those of industry.

Sources

Owing to the special conditions of pay for miners mentioned above, most statistics of wages in mines are statistics of *earnings*. Many of them, in fact, are not compiled for purely statistical purposes, but are an outcome of State supervision over the activity and conditions of employment of mining establishments. *Statistics of wage rates* are compiled in six or seven countries. Figures taken directly from *social insurance* statistics are, as far as the Office is aware, available only in one country.²

¹ *Wages and Hours of Work in the Coalmining Industry*. Studies and Reports, Series D, No. 18 and *International Labour Review*, Vol. XX, Nos. 4 and 6, October and December 1929, Vol. XXIII, No. 5, May 1931, and Vol. XXX, No. 3, September 1933.

² Czechoslovakia.

Time Units

Most statistics of earnings in mines are compiled per day or shift. It should be noted that the length of a normal shift may vary according to the country or the coalfield, and even in one country it may change in the course of time. Furthermore, besides the normal shifts there are supplementary, overtime or short-time shifts of very variable length. To determine earnings per hour it would therefore be necessary to know the exact length of these different shifts—a difficult matter, if it is desired to exclude travelling time and breaks underground. These difficulties account for the fact that only in one or two cases do national statistics give figures for hourly earnings.

Again, to estimate the average annual earnings, the average number of workers employed during the year must first be known. Many statistics of earnings in mines can provide a simple average of the number of workers on the payrolls at various dates during the year, and in some countries this figure is considered sufficient for determining annual earnings per worker. In others, the methods of calculation are more exact. In certain countries average earnings are also calculated per full-time worker, the number of full-time workers being obtained by dividing the total number of normal shifts worked by 300.

In the International Labour Office enquiries the special information which has been collected has made it possible for comparable data to be obtained for 10 countries on average earnings per hour, per shift, per working day, and per year.

Occupational Groups, Age and Sex

In all statistics of wages in mines a primary distinction is made between underground and surface workers. Underground workers are often further divided into skilled workers (hewers, loaders, etc.) and other workers. Surface workers are classed according to sex and age (adults and young persons). It is only in some special enquiries and in the few statistics of wage rates that more detailed occupational distinctions are made.

Territorial Units

Almost all the available statistics give separate figures for each coalfield of any importance, as well as general averages for the whole country.

Weighting

The problem of weighting in the statistics of miners' wages is similar to that in wages in industry. For statistics of earnings, the weights vary in time according to the number of workers covered in the statistics; for statistics of rates the weights are generally invariable. It should also be noted that most statistics of earnings in mines cover practically all mining establishments under consideration, so that the weighting is necessarily representative; this, as shown above, is not generally the case as regards wage statistics in industry.

Information on Subsidiary Items of Remuneration

The various allowances, in particular, the allowances in kind, which as already stated play an important part in mining wages, are generally included in the calculation of average earnings, although the amount of the allowances is not always shown separately. In many countries, the value of these allowances, always a difficult matter, is calculated with sufficient care and detail as to give reasonably complete figures. Some of the allowances are also taken into consideration in statistics of wage rates.

On this subject the enquiries of the International Labour Office have obtained fairly homogeneous figures which make it possible to express the subsidiary items as percentages of total earnings.

Frequency of Publication and Time-Lag

Data are compiled quarterly or yearly, according to the country; for monthly or quarterly figures the time-lag is from 3 to 6 months, and for yearly figures one year or more.

C. — SERVICES

(Transport, public administration, commerce, personal services)

The conditions of employment and pay in the various branches included in this section do not remotely attain the degree of uniformity which has been reached in industry and mines. In several of these big groups, e.g. in railways and tramways, banking and insurance, large-scale trade, and public administration, a

considerable part of the workers enjoy greater stability of employment than in industry and they are paid more often by the month than by the day, the week or the fortnight. Moreover, their wages or salaries are usually graded according to length of service, whereas in industry there is usually a fixed and uniform rate of pay for all normal adult workers, who have finished their apprenticeship. Finally, in most of the branches mentioned and in others as well, the workers have the advantage of paid holidays which are generally longer than in industry; again, workers engaged by the month or the year generally receive, in case of sickness, full or part wages or salaries for a relatively long period. On the other hand, for some workers in these branches, and for other branches and services, the conditions of employment are very irregular, and work is often paid by the hour or by the day. For certain categories such as seamen, there are special conditions of engagement, on account of the nature of the work. In branches such as domestic service in private houses, service in hotels and restaurants and in small retail shops, an important part of the wages consists of the lodging and in some cases the board supplied by the employer, and the hours of work are not clearly defined. In some of these branches the "tipping" system is a factor with great influence on the workers' wages. Finally, in many of these varied branches there are often few collective agreements, so that conditions of work and pay are far from being standardised.

These circumstances taken as a whole, make the compiling of statistics on hours and wages in services more difficult as a general rule than in industry, and owing to the special conditions which prevail in the different branches, each branch requires appropriate methods of treatment. They are at the present moment more suited for the undertaking of special enquiries, sporadic investigations, and local studies rather than for the compiling of regular and systematic statistics.

Only in certain branches of transport, particularly railways and tramways, and in some rather limited branches of commerce have wage statistics reached a stage comparable to that reached in industry and mines. In these cases the figures published generally form part of a system planned to cover the whole of the manufacturing industries. For example, in the synoptic tables given above which consist of series dealing principally with industry and mines, quite a number of series also include certain services, e.g. in 15 of the 20 countries in the table of periodical statistics

of wage rates the series also include certain branches of transport, in 9 they include commerce, and in 7 some public administrative services; in 8 of the 20 countries for which periodical statistics of earnings are given, these statistics also include transport undertakings, in 7 countries they include commerce, and in 3 they include some public administrative services; in 5 of the 10 countries in which there have been special enquiries into earnings these enquiries included transport services, in 3 they included public administration and in 2 commerce. Finally, in the 7 countries where wage statistics have been obtained from social insurance schemes, these statistics all covered at least some branches of transport, 6 covered certain branches of commerce and 2 certain public administrative services.¹

The International Labour Office has covered transport (a few categories) in its periodical enquiry into wages in certain occupations, but it must be acknowledged that the figures obtained on this subject are less satisfactory than those for industrial occupations. Moreover, the Office has recently collected for the first time the available data on seamen's wages,² and experience has shown that the information available is very heterogeneous.

All the statistics available for these various branches are of the same type as the statistics that have been described for industrial wages (wage rates, earnings, insured wages). To explain their peculiarities again in detail here appears unnecessary; besides, these statistics are as yet so little standardised that an analysis of the different types would entail entering into much secondary detail and would therefore be extremely long and of little interest. It will be sufficient to mention a few of the particular difficulties of any attempt to employ the usual methods in the different branches of the services.

Wage-rate statistics are in fact inapplicable in a great number of these branches where there are neither collective agreements, arbitral awards nor legislation to regulate conditions of work. On the other hand, many of the branches in which such pro-

¹ This summary does not give a complete picture of the statistics regularly published on the different services, for no account has been taken of series compiled *independently* of the series covering mainly the manufacturing industries. Mention should be made for example of the periodical statistics of earnings in transport, chiefly railways, published regularly in Great Britain, the United States and Japan, and those for commerce published in the United States.

² *Maritime Statistical Handbook*, 1st Part, "Salaries and Wages of Merchant Marine Personnel" — Studies and Reports, Series N, No. 21, Geneva, 1936.

visions do exist are in effect those which apply the system described above of graduating wages according to length of service. Statistics of rates can therefore do no more than give the minimum and maximum levels for each class of workers. Since these limits and the rates of increase within these limits vary materially, and since it is impossible to know without supplementary enquiries what position the average worker in the various establishments occupies in the scale, the figures are necessarily of limited value.

A difficulty of another kind consists in drawing up comparable occupational categories, for in most of the services there is even less correspondence between the names of the categories and the nature of the work than there is in industrial occupations. Typical cases are those of clerks and of employees in public administration, where the classification adopted gives practically no clue to the nature of the work or the responsibility involved.

In these conditions it would appear that statistics of earnings are likely to supply more satisfactory information; but in branches where small businesses still predominate it is extremely difficult to obtain the necessary information. Again, it would often be impossible to determine hourly earnings since the hours of work or of attendance are often ill-defined. Any attempt to fix earnings per pay period (week, month) meets with the difficulties already mentioned, which are even greater if the period is the month, for the longer the period, the greater is the chance of change in the workers employed.

The possibilities of social insurance statistics depend on how far the scheme of compulsory social insurance is extended to certain services. It has been indicated above that in certain branches of transport or commerce, social insurance could already provide figures similar to those for industry.

D. — AGRICULTURE

Conditions of employment in agriculture are particularly varied. In some countries the methods of cultivation are still extremely primitive, whereas in others they have reached an advanced stage of specialisation and mechanisation. The systems of large estates and small holdings, the forms of tenancy, together with local usage and custom, which is often stronger than in towns and industrial centres, produce a great variety in the terms of employment contracts. The nature of the work itself, the fact that the worker must live on the spot, and the difficulty of super-

vising work which is often carried out on land at some distance from the farm buildings, have given rise to varied methods of remuneration in which payments in kind and a certain share in the risks and profits of the undertaking play a large part.

The compilation of wage statistics for workers in agriculture is therefore a particularly difficult task. Wage statistics compiled at regular intervals, now exist, for at least some classes of workers, in about thirty countries, most of which are fairly important from the agricultural point of view. The International Labour Office has on various occasions published tables of the chief figures available.¹

Data on hours of work in agriculture are very scarce. Those available generally give the normal hours or maximum hours fixed by law, collective agreements, or arbitration awards or exceptionally² by special enquiries. Some statistics also give the total (minimum or normal) number of working days in the year for certain classes of workers. Practically no information is available as to hours actually worked.

The attached synoptic table illustrates the essential features of the principal series of periodical statistics of wages in agriculture. Although drawn up on the same lines as those for industry and mines, the table is in a more summary form. The very heterogeneous state of wages in agriculture makes in fact an analysis of this kind rather difficult and the information available in the Office in this sphere is less complete than for industry.

Sources

Statistics of agricultural wages published in the various countries are derived from different sources, which may be grouped under 2 principal headings:

- (a) collective agreements, arbitral awards or decisions of occupational associations, legislative orders;
- (b) direct returns obtained by statistical or administrative services either through their own agents, or through local correspondents, or through communications from employers;

¹ Cf. *International Labour Review*, Vol. XXX, Nos. 5 and 6, November and December 1934: "Statistics of Wages of Agricultural Workers in Various Countries, 1927-1934", and *Year-Book of Labour Statistics, 1935-1936*, Table XII.

² United States.

Reservations must be made in the case of each of these different kinds of statistics. Particulars taken from collective agreements are naturally subject to the same reservations as in industry. As regards the direct returns, the accuracy of the figures collected may vary to a great extent according to the way in which the information was obtained and the number of returns received. In some countries this method gives satisfactory results; in others it only produces approximate figures. In addition to the above statistics, there also exist certain enquiries held by farm accounting associations or agricultural workers' unions to determine farming costs and also the cost of labour. These data are of a rather special nature and are not very comparable with those already mentioned: They are excluded from the table.

Time Unit

The principal time units used in agricultural wage statistics are: hours, days, sometimes weeks but more often months, half-years (calendar or season), and years. It may be assumed that the time unit adopted in the statistics generally corresponds to that for which wages are fixed or paid, although information is not usually given on this point in the original statistics. These time units may vary even among categories of workers having contracts of the same duration; for permanent workers, for instance, the time unit may vary from the whole year to the hour.

Occupational Categories

Agricultural workers fall into many different occupational categories; between which it is rather difficult to draw clear lines. The kind of work performed, which, in industry, is the usual basis of distinction between workers, is not so characteristic in agriculture.¹ The wage statistics are therefore very rudimentary in their distinctions as to the kind of work performed. In most countries the statistics refer to the common categories of workers, "agricultural workers", "farm servants", "day labourers", without stating the particular work they perform. In some countries statistics are given for certain classes of workers specialised in

¹ It is true that the large estate has its managing staff, overseers, foremen, mechanics, cattlemen and shepherds, grooms, and ordinary field workers, but even here the total number of specialised workers proper forms only a fraction of the total staff. In many cases a rough distinction could be drawn between workers on the land and workers in charge of animals, but on small farms even this distinction disappears, as both the work with animals and that on the land are generally done by the same person.

a branch of farming is particularly developed in the country, for example, cattlemen in dairy farming, shepherds in sheep rearing, etc. In a few statistics certain workers are described by the work they carry out during given seasons, e.g. ploughmen, harvesters, etc., but it is possible that the same individuals carry out these tasks at different seasons.

The question of the duration of the engagement of the workers is particularly important in agricultural wage statistics on account of the great differences between the existing systems. In this respect three main types can be distinguished: (1) permanent workers¹ engaged, tacitly or explicitly, according to the contract, for the whole year; (2) seasonal workers engaged either for a "season"—generally the whole summer half-year—or for the duration of certain tasks; (3) casual or temporary workers engaged by the day or for short periods. Certain statistics make a clear distinction between the workers according to the nature of their engagement. Others do so less clearly, but the information can generally be inferred from the description of the workers or the unit of time in which wages are expressed.

Age and Sex

The distinction by sex is made generally in all agricultural wage statistics, for in agriculture, perhaps even more than in industry, it constitutes a primary distinction for the categories of workers and the kinds of work they perform. On the other hand, only a few countries give separate figures for adult workers and young people generally obtained from collective agreements or the decisions of trade boards. The conception of an "adult" worker not only varies from one country to another, but often is even different from that accepted in the industry of the same country. In many countries where statistics give precise information in this respect, "adult" wages are paid to all workers over 17 or 18 years of age. In some countries, on the other hand, there are special graduated rates of pay for young workers which sometimes apply up to 23 or 24 years of age.

¹ It is however to be noted that a permanent engagement is not always identical with full stability of employment. In some cases the contract obliges the worker to be at his employer's disposal when required during the duration of the contract, in compensation for which he may occupy a dwelling belonging to the employer or receive certain allowances in kind; beyond this he is paid only for the time actually worked. In order to economise, especially during periods of depression, farmers do not always call regularly on the assistance of such workers, who run the risk of finding themselves without work on certain days, especially during the winter, or at slack periods during the summer, when they may have difficulty in finding casual jobs elsewhere.

Territorial Units

In most cases the data are compiled separately for various administrative units, for different natural regions or different farming regions. The principles on which these subdivisions are made vary from one country to another. In most cases averages are calculated for the whole country, but there are several countries where the statistics give only regional averages.

Weighting

On account of the rather general character of most agricultural wage statistics, the problem of weighting has generally been solved in an elementary manner. In the first place, it is considered only from the geographical point of view in order to assign due importance to the different regions in the average wages for the few occupational categories of workers concerned. Since in most countries there is no general series combining the series for the different occupational categories, the problem of weighting according to the importance of these categories does not arise. Geographical weighting, when it is done, is based on the number of workers (obtained from the population census or other complete administrative returns) in the categories approximately corresponding to those of the wage statistics. In many cases, however, there is no weighting, and a simple arithmetical average is computed from the wage returns in the various regions or administrative areas; when the areas are numerous, such a method does not in fact give appreciably different results from those obtained by weighted averages.

Information on Allowances in Kind

One of the chief characteristics of the method of remuneration of agricultural workers is, as already stated, the frequency and importance of payments in kind; very few agricultural workers are paid exclusively in cash. Farm servants, seasonal migrant workers, and many casual workers are usually lodged and boarded by the employer or, in the case of the last group, boarded only. Permanent married workers often live in a dwelling belonging to the employer and receive, in lieu of board, certain allowances in kind, such as cereals, potatoes, butter, fuel, the right to use a plot of land, to keep some live-stock on the employer's premises, etc.¹

¹ In Central Europe the sum of these allowances is known by the term "deputat" and the workers remunerated in this way as "deputatists".

Sometimes the cash wages paid are very small though it is rare for workers to be paid exclusively in kind. In some cases workers receiving cash wages pay their employer for accommodation or board, sometimes at the cost price and sometimes below it, or they may be entitled to purchase farm produce from the farmer below market prices.

It is therefore most important that agricultural wage statistics should contain information on this subject, but the practical difficulties in the way of making estimates are very great. The bases for making estimates is sometimes entirely lacking and the statistics give no information on this point. The value of the figures for money wages only is then very limited, particularly if the payments in kind are of any importance.

At the present stage in agricultural wage statistics the estimates supplied on the value of payments in kind have to be accepted as they stand, although from the international point of view they are made by methods which are anything but homogeneous. It should be pointed out especially that the method used must obviously vary according to whether the aim in view is to calculate the cost of labour from the employer's point of view as an item in his total cost of production, or to estimate the worker's earnings in order to get some idea of his standard of life. Again, the value of housing, for example, is not the same for the permanent worker who lives with his family on the holding he works as for the unmarried worker who has no other home.

Frequency of Publication and Time-Lag

The frequency with which the data are compiled—which is influenced to some extent by the time unit in which the wage data are expressed—also varies from country to country. Sometimes averages for the whole year are given; sometimes the data are available at different intervals in the year and no annual averages are calculated. These intervals may be calendar periods (month, quarter, half-year) or the seasons, defined either as such (spring, summer, autumn, winter), or by the character of the principal operations performed (ploughing, sowing, haymaking, harvest, vintage, etc.). Sometimes, lastly, the figures are compiled once a year and refer to a single date or season of the year. The time-lag in publishing the figures is generally a little longer than for statistics of wages in industry, although in recent years appreciable progress has been made in this respect. For monthly

and quarterly figures the time-lag is between three and four months; for annual figures, from less than six months to one year or sometimes two years.

2. Nature of the Principal Statistics of Total Wages

The preceding chapter examined the various existing statistics which can be used to supply data on average wages and average hours of work per worker, and on the distribution of wages and hours. In this chapter the object is to consider the available data from another aspect of the remuneration of the workers, on which information is also desirable, namely, their total wages, that is to say, the total income drawn from their labour by all employed workers (including, if possible, salaried employees). In this case it is not a question of determining the workers' average income per hour, day, week, year, or the average cost of an hour's work, but of determining the total income derived by the workers as a whole from their labour, in order to assess either total purchasing power, or its share of the national income, or the proportion of labour cost to the total cost of production.

Until fairly recent times the data yielding such information attracted less interest than those of wages per worker, but with the growth of enquiries into economic fluctuations they have acquired importance. The International Labour Office made a first attempt to assemble¹ the available series covering the last ten years or so, and some 30 series covering over 20 countries, were compiled most of them referring to countries of some industrial importance.²

Though the problems connected with the compilation of these data resemble in some respects those arising out of the compilation of statistics of wages per worker, they are in others quite different. For compiling statistics of average wages per worker and for a specified time unit, it is possible to a large extent to obtain

¹ *International Labour Review: Statistics of Total Wages and Salaries, Vol. XXXIV, No. 3, September 1936; and Year-Book of Labour Statistics, 1937.*

² The question might also be raised whether the statistics of total wages should not be examined along with those capable of giving information on the total number of hours worked. This had not been done here because it was felt that the question was one belonging to the statistics of employment, which are not touched on here.

averages that are reasonably representative of the whole with a comparatively limited sample. This is the case with statistics of rates, which in fact represent only the normal wages of workers covered by the collective agreements, arbitral awards or legislative provisions from which the data are obtained. Similarly, statistics of average earnings represent only the wages actually paid to the workers in the undertakings covered by the returns; although these statistics are based on only a proportion, sometimes a small one, of the total number of workers, it is assumed—and the assumption has been verified in practice—that, subject to the reservations made above, these figures may be regarded as representative of the average wages of the whole of the workers in question, or at least of the fluctuations in their average wages.

To compile statistics of aggregate wages, on the contrary, a total must be obtained, and in principle, all the workers in employment must be covered and their wages recorded, but in practice owing to the difficulties involved, it is usually sufficient to cover somewhat less than the total number of workers. Data of this kind are to be found in two kinds of statistics, which are at present published at regular intervals in a fairly large number of countries: social insurance statistics and statistics of industrial production.

In view of the impossibility of obtaining absolutely complete returns, the question immediately arises of the effects that any omission in the statistics may have on the significance of the results. If the fraction not covered by the returns remains very small, the absolute figures, although not quite complete, will be sufficient to determine the order of magnitude of the sums in question. If the omissions are of some size, the absolute value of the figures obtained loses almost all its significance, and the data are of interest chiefly if they are expressed in relative form, with a view either to bringing out fluctuations over a period of time in the form of index numbers, or to bringing them into relation, in the form of percentages, with other data covering the same field (e.g. data obtained from production statistics on the gross or net value of production or the value of the raw materials used or quantities produced). These percentages however can be compiled only in the case of statistics of production, and the determination of the other data with which wages are to be compared is subject to many reservations owing to the great technical difficulties involved in their compilation. In the present state of the available material, data of total wages are therefore of interest, at least from the international point of view, chiefly

when they have been converted into index numbers so as to bring out fluctuations in time.

The statistics of earnings considered in the previous chapter lend themselves much less to the determination of total wages because in most cases they rest on only partial or "representative" returns. The proportion of the establishments and therefore of the workers employed, covered by these statistics inevitably varies from the date of one return to another. In the first place the number of undertakings covered is affected because some of the undertakings neglect to send in returns or reply in an unsuitable form, and some close down altogether, the substitution of others always being somewhat arbitrary. Secondly, the total number of undertakings in existence and of workers covered by statistics of recording these changes except by obtaining complete returns, obtained from partial returns therefore always suffers from the risk of not being representative of the whole. Consequently, these data are used for the purposes in question only in a very few cases.

It seems, however, that much greater use could be made of these statistics of earnings in order to obtain an estimate of the fluctuations in total wages, at least for all industries together. They are at present available in a number of countries, and if suitably treated, might usefully supplement the statistics of production or insurance statistics, which are generally published only at fairly distant intervals. To measure fluctuations during a short period, say one year, the chance of error in the statistics of earnings would be insignificant, and these statistics might therefore serve to keep the production or insurance series up to date by means of provisional figures. Similarly, in the absence of other information, satisfactory series of total wages might be obtained by combining the earning data with those employment data which are based on complete or almost complete returns, such as those drawn from unemployment insurance or other social insurance schemes, but which do not themselves supply figures on total wages.¹ Such estimates have been made in some countries, in

¹ It is true that in this case it would properly speaking be necessary to multiply the number of workers employed by the average annual earnings. But as these last data are hardly ever available, it seems that it might be sufficient to use estimates based on average weekly earnings. If the only data available relate to hourly or daily earnings, the estimates would be more difficult to make; if, however, statistics of hours worked or of employ-

particular to determine the share of labour in the estimated national income.

The statistics that can be used to determine total wages are thus derived partly from the same sources as those used to determine wages per worker and partly from different sources. But if one and the same source is used for two purposes, it is usually better suited to one of the two. Thus social insurance statistics, which are not of great importance for determining wages per worker, are on the contrary one of the principal sources for calculating total wages. This is also true of production statistics, which have been mentioned only very subsidiarily in the previous chapter as a possible means of calculating annual earnings per worker, while they form one of the two important sources for determining total wages. On the other hand, statistics of earnings do not lend themselves well to the determination of total wages, and those of wage rates are not at all suited to this purpose.

The statistics of total wages have been analysed in the form of synoptic tables, designed to bring out in summary fashion the main features of the principal statistics used for this purpose. The tables make no claim to give a complete view of the question. They are limited to the two most important kinds of statistics for calculating total wages: social insurance statistics and statistics of industrial production (statistics of earnings properly so called having been analysed in the synoptic tables of the previous chapter). From these two sets of statistics the tables have taken only series covering at least all manufacturing industries and appearing periodically (at least every second year). Consequently no account has been taken of those censuses of production or of undertakings carried out every five or ten years. Similarly, the tables omit a few series which provide figures on total wages which the countries concerned do not consider reliable. Series established for *one branch of industry (or one service)* alone are also left out of account. As regards statistics of earnings and in particular earnings in mining, which form a third source of statistics of total wages, these were analysed in the tables of the previous chapter and there seems no need to repeat them here. Finally, the few "estimates" to which reference was made above are not included, for the great variety of the methods used does not lend itself to the necessarily summary form of analysis used in these synoptic tables.

inent are able to give information on the total hours worked or at least on the fluctuations in this total, another possibility of making some kind of estimate would be available.

Sources
The principal statistics that can be used for obtaining data of total wages are thus:

- (1) Social insurance statistics;
- (2) Statistics of production;
- (3) Statistics of earnings (total payrolls);
- (4) Various "estimates".

In the accompanying tables social insurance statistics are given for 14 countries and statistics of industrial production for 15. Statistics of earnings used for determining total wages are to be found only in 2 countries. Periodical "estimates" are made as far as the Office is aware for 4 countries.

Series based on statistics of industrial production are of course limited, as the name implies, to industrial undertakings. In the case of the two series based on statistics of earnings, agriculture (or social insurance) statistics some series comprise agriculture (or certain branches), but in some cases the data are subject to important reservations. The series drawn from "estimates" are usually wider in scope and cover all the main branches of economic activity.

Social insurance statistics

As was shown in the previous chapter, social insurance statistics can in some countries provide data on average wages per worker. In many countries these statistics show the total wages insured, but are not suitable for the determination of average wages per worker, owing to the lack of suitable data of the number of workers insured or the number of days worked. On the other hand certain series which are adequate for determining the total wages bill. The series which are not appropriate for measuring the total wages bill are for 9 countries, but only 7 countries give wages per worker for social insurance statistics made for 9 countries, but only 7 countries give wages per worker.

The reservations in regard to social insurance statistics made in the previous chapter, as to the maximum income often fixed for insured wages, which lowers the average wage, naturally apply also to the data of total wages. Another reservation, of no significance for the establishment of average totals; it is due to the fact that most social insurance schemes apply, not to every worker in the branches covered, but to nearly all of them, for often very

small establishments or those using no mechanical power are exempted from liability to insurance. The proportion is usually very low, and the absolute error will thus be slight. The fluctuations, however, in time of these totals, would probably remain representative, although here, too, account must be taken of a small reservation. For even though the provisions governing the scope of the insurance scheme may remain unchanged, the number and proportion of establishments not covered by the statistics may vary with the degree of business activity. The discharge of a single worker may in fact exempt an undertaking from liability to insurance, or the engagement of an additional worker make it liable.

Any change in the insurance scheme—its extension to new economic branches, alteration in the maximum limit for the insured wage, etc.—will obviously affect the comparability of the series in a period of time.

Statistics of production

The sources from which the data of total wages given by these statistics are obtained are in fact the same as those used for the statistics of earnings per worker considered in the previous chapter, that is to say, pay-sheets. But there are two essential differences in the data. In the first place, whereas the statistics of earnings are compiled for the express purpose of obtaining data of average earnings per worker (and if need be, average hours worked and average number of workers employed) and therefore give fairly detailed figures, statistics of production, as their name indicates, aim primarily at measuring production, and their data of total wages, being so to speak subsidiary, provide only few details. Secondly, statistics of earnings are based in most cases on representative returns—and it was shown above what drawbacks this involves in determining total wages—whereas statistics of production are obtained from practically complete returns.

Of the 14 countries included in the synoptic table, there are 7 where the statistics cover all establishments employing over 2 to 5 workers, 2 where they cover all establishments with more than a comparatively low output, and 2 where they cover all or practically all establishments. Only in a few cases is the proportion not covered by the statistics comparatively high: in 4 countries the statistics cover only establishments employing more than 10 to 20 workers, limits which, owing to the industrial structure of these countries, leave out a fairly large number of workers. It is true that this criterion of the number of workers

is in many cases supplemented by an alternative criterion, the use of mechanical power, the application of which may mean a marked extension of the scope of the statistics.

It should also be remembered that the same criterion may not have the same significance in every country, owing to differences of industrial structure. Similarly, the application of a particular criterion in any one country may lead to the inclusion or exclusion of a varying number of establishments according to the degree of general business activity and of the activity of each establishment. These statistics are therefore subject to reservations similar to those made above in regard to social insurance statistics.

Statistics of earnings

At present there are only three countries in which statistics of earnings, properly so called, are used also to measure total wages. In one of these countries,¹ the variations in the partial total of the wages earned, during a pay period by the workers who are covered by the representative returns used for the monthly statistics of earnings in manufacturing industries are employed to interpolate and extrapolate data in the series of total wages obtained from the biennial censuses of production, which are based on practically complete returns. In another country² the statistics of earnings cover all mining and metal working undertakings and all industrial undertakings employing not less than 20 workers. This represents a comparatively stable proportion of all workers, so that the totals obtained are used as they stand. In a third country,³ statistics of earnings have been used retrospectively to evaluate the total wages bill and they will be so used annually in the future. Moreover, a new series of quarterly statistics gives the total wages bill for a certain week in the principal branches of industry.

Besides these statistics, there are also the statistics of earnings in mines considered in the previous chapter. In the 12 countries where these statistics are established separately,⁴ they are generally based on complete or practically complete returns from all mining

¹ United States.

² Poland.

³ Sweden.

⁴ It should be noted that these mining statistics bear some resemblance to those described here as statistics of industrial production. Like the latter, they provide figures of production which may be compared with the wage figures. In the mining statistics, however, the data of the workers' earnings are more detailed and more exact than in the statistics of production, and it is for this reason that they have been classed here with statistics of earnings.

undertakings, whereas the statistics of earnings in industry are, as already stated, generally based on representative returns. The series are thus able to supply reliable data concerning the total wages of mine workers, and the figures can be used to supplement any series obtained from the statistics of industrial production, which are usually limited to manufacturing industries only.

The statistics of earnings in mines having been discussed in some detail in the previous chapter, there is no need to return to them here, since most of the remarks made before apply also to their use for the measurement of total earnings.

Estimates

In 4 countries, finally, there are various estimates of the workers' total earnings, usually made in connection with estimates of the national income. The methods employed are, as already stated, very various and often consist of a combination of the data mentioned above or some variant of these, or of a combination of the data of average wages per worker (earnings or rates) with those of employment or occupied population and, in some cases, of the hours of work of wage earners and salaried employees. Sometimes statistics of taxation are also used as an additional source of information.

Time Units

In insurance statistics as in production statistics the time unit in terms of which the data are given is very generally the year. In some insurance statistics, the figures published relate to the daily average of the total insured wages. A theoretical annual figure may then be calculated by multiplying this average by the actual number of working days, or a standard figure of 300; but the annual sum so obtained may in some cases be rather imaginary, owing to the method of determining the daily figure. In the series drawn from statistics of earnings, the total wages recorded relate to the period covered by the periodical return.¹

Industrial Groups

Since the series most often employed to obtain information on total wages are usually compiled for other purposes, it is not to

¹ This payroll period may therefore be shorter than the intervals at which the data are published. For example, returns made monthly usually cover a period of only one or two weeks in each month.

be expected that they will have detailed subdivisions for the different economic categories. None of these statistics give data by occupation, and separate figures by industry are available only in the production statistics or in 4 out of the 9 countries considered (together with 2, where the figures are given per group of trade funds) in the case of insurance statistics.

In addition, production statistics usually make a distinction according to status, for these statistics, usually cover also salaried employees and even the management of the undertaking. The classification used varies, of course, somewhat from one country to another. Out of the 14 countries considered, the statistics of only 3 are limited to wage earners alone. In 2, "wage earners" are grouped with "salaried employees" and, in 9, the two are given separately. Out of these 9 countries, there are 3 where a further distinction is made between salaried employees and managing staff.

Age and Sex

The distinction between adults and young persons is not given in any of the statistics of social insurance and production statistics considered here. Some of the statistics make a distinction by sex; in the insurance statistics, 2 countries (out of the 11 covered) and, in the production statistics, in 6 countries (out of 14).

Territorial Units

Since insurance and production statistics are based on complete or practically complete returns, the totals obtained always apply, of course, to the whole country. Subdivisions by region, of whatever kind, are to be found in the insurance statistics of 3 countries and in the production statistics of 8.

Weighting

In the two kinds of statistics considered here, the question of weighting does not arise, since the returns are practically complete.

Additional Information

Information on the subsidiary items of remuneration considered in the discussion of statistics of average wages per worker are not generally given in these statistics. On the other hand, production statistics, often given the cost of the raw materials, the cost of

heating, power and lighting used in production, the value of the goods manufactured, etc. The manner of determining these different items, particularly the calculation of the gross and net (or added) value of production varies from country to country and likewise the proportion of labour cost to the total cost of production.

Frequency of Publication and Time-Lag

Most of the statistics considered here are published annually. In two countries, however, social insurance statistics are published monthly, and in a third country, quarterly. On the other hand, the production statistics of one country¹ are published only every two years. The time-lag in publication is usually rather longer than for most of the statistics of wages per worker. For the annual statistics, it usually varies between a year and a year and a half, but in several cases it is as much as two years and even more; in one case, it appears to be shorter. For monthly and quarterly statistics, it lies between one and three months.

3. The Standardisation of Statistics of Wages and Hours of Work

Every attempt at standardisation of statistics of wages and hours—as of every other kind of statistics—must take account of two partly irreconcilable considerations: first, the purposes which the statistics are supposed to serve, and, secondly, the practical possibility of compiling statistics which will fulfil these purposes. The purposes which may be envisaged for statistics are, of course, very numerous, in fact almost unlimited; the practical possibilities, on the other hand, are often rather narrowly limited. Statistics are compiled primarily for national purposes, and it would be quite idle to expect the national statistical services to reduce the domestic utility of their statistics in the interests of international comparison. Any modifications that can be demanded with a view to the improvement of international comparability must be such as will improve also the national utility of the series. In other words, international standardisation must conform to

¹ United States (an index number referring to these statistics is published, however, every month).

national requirements and constitute a development of national standardisation.

Purpose of Statistics of Wages and Hours of Work

Briefly, the purpose which ought to be assigned to statistics of wages and hours of work in the national field, or, in other words, the ideal programme which ought to be pursued in the compilation of these statistics, may be summarised as follows:

I. — To provide a measure of wages and hours of work per worker:

(a) expressed in terms of various time units, i.e.:

(i) the hour,

(ii) the pay period (the day, week, fortnight, or month),

(iii) the year;

(b) for different groups of workers, i.e.:

(i) for specified occupations, or, where this is not possible, for specified degrees of skill in certain industries,

(ii) for specified industries,

(iii) for all occupations or industries together which correspond to each of the main economic groups (agriculture, mines, industry, services, etc.), and for all of these main groups together (the whole country);

(c) distinguishing between male and female workers and between adult and young workers;

(d) for different towns, administrative districts or economic regions of the country;

(e) at given regular dates;

(f) in the form of:

(i) averages per worker in money,

(ii) relative figures expressing the relations between these absolute figures, and in particular, index numbers indicating fluctuations in a period of time,

(iii) distribution (percentage) of workers whose wages and hours of work lie in defined classes of wages and hours of work;

- (g) with additional information on:
- (i) payments for overtime,
 - (ii) the various bonuses and allowances (in particular, family allowances),
 - (iii) paid holidays.

- II. — To provide a measure of the aggregate wages received by all workers
- (a) during the year;
 - (b) in specified branches of economic activity, i.e.:
 - (i) in industry,
 - (ii) in each of the main economic groups (agriculture, mines, industry, services, etc.), and in all these groups together;
 - (c) distinguishing between wage earners and salaried employees.
 - (d) for the main administrative areas of the country, when occasion demands;
 - (e) at given regular dates;
 - (f) in the form:
 - (i) of totals expressed in absolute figures,
 - (ii) of index numbers showing fluctuations in a period of time.

In the international field, the purpose remains the same with this small difference: that the distinctions between town and town, or district and district, lose their importance, the national units generally constituting the units of comparison.

Practical Possibilities
The plan which seems the most practicable in view of these various purposes, and to this ideal programme, is to envisage two sets of mutually complementary statistics: detailed enquiries with a wide scope carried out at relatively long intervals (several years) on the one hand, and on the other, periodical enquiries more summary in nature and of more limited scope but carried out at shorter intervals (monthly, quarterly, annually). This system has generally been adopted in the countries having the most developed wage

statistics.¹ In other countries, however, only one set of statistics is compiled midway, as it were, between the summary periodical series and the detailed special enquiries. In these countries the series are fairly detailed, fairly wide in scope, and compiled at fairly frequent intervals.² This system has the merit of showing at any given date more details than the summary series of other countries; it has the disadvantage, given the large amount of work and expense which it involves, of rendering very detailed special enquiries practically impossible, or at any rate, of making their execution very difficult. For the purpose of obtaining total wages and salaries, however, the data generally utilised are generally those of the last category based on complete or almost complete returns for the occupations considered, but without great detail; these statistics are usually compiled annually.

It should be emphasised that according to the source from which statistics are drawn they lend themselves more or less easily to the purpose enumerated above.

Statistics of rates, limited to rates per hour and per pay period and normal hours of work per pay period, (generally exclusively for time workers) in a small number of specified *occupations*, distinguished according to sex but usually limited to adults, and covering, at given regular dates, different towns or districts, and averages for all these combined, are the most useful for compiling summary periodical series. It is only in a few countries³ that regular statistics of rates have been developed covering a large number of occupations; and it is only in certain of these countries that averages by *industry* are calculated. As to supplementary data on overtime rates, the various types of allowances, and paid holidays, these cannot be obtained systematically otherwise than by a minute analysis of collective agreements, arbitration awards, and legislative provisions. It would seem, therefore, that special enquiries will be necessary to collect material of this kind (except for the small items of information relating to the more important allowances, which appear in the footnotes to the tables).

Except in cases where the statistics refer to a large number of occupations, averages (in absolute figures) for industries or for large economic groups should not be compiled, for these figures would run the risk of not being representative. Index numbers,

¹ Germany and the United States, for instance.

² Poland and Sweden, for instance, at yearly intervals.

³ Australia, Austria, Canada, Germany, Great Britain, New Zealand, for example.

on the other hand, even if compiled on the basis of a limited number of occupations, might, it seems, be considered truly representative of the general movement of wages per hour and by industry or by main economic groups, distinguishing where possible between male and female workers, for each district and for the whole country, and shown for regular dates, the statistics of earnings in the form of summary series are the most useful. Periodical statistics of actual hours of work are apparently most easily compiled per day and by industry, but they distinguish only very rarely between the sexes. Data on average earnings and actual hours of work per pay period (generally the week) are, as we have seen, rather more difficult to determine, although they are more frequently given in the form of periodical series. Still more laborious is the compilation of these different data by occupations, and generally this is attempted only in special enquiries or in periodical series constituting a single set of statistics. Index numbers are calculated without great difficulty, but the frequency distributions are found only in special enquiries and the additional information on overtime pay and the various bonuses and allowances, these items are generally included in average earnings. Only the more developed periodical series and the special enquiries are able to provide average earnings per normal hours of work and give separately the amount of other payments; paid holidays—which statistics of earnings have not taken into consideration hitherto—could only be dealt with by special enquiries. The determination of annual earnings is, as we have seen, particularly difficult, and it will not be possible to compile such series satisfactorily until the statistics of earnings have been perfected.

The statistics of industrial production are among the most important statistics from the point of view of determining the total wages of workers in certain economic groups. They draw their information from the same sources as the statistics of earnings, namely, from the payrolls of undertakings; but they differ from the latter statistics which are generally based on representative returns, whereas statistics of production are generally obtained from complete or practically-complete returns. Hence these statistics involve a considerable amount of work and cannot be expected to provide detailed figures regarding wages. The most that it is possible to demand of them is that they distinguish between industry and industry, between wage earners and salaried employees, and between male and female workers. The statistics of

earnings in mines, based generally on almost complete returns, lend themselves also to the determination of aggregate wages in mining.

In certain countries *social insurance statistics* can be used in some countries for the determination of wages per worker. Compiled as they are for other purposes, however, they only give rather summary information on this subject: wages per day and by industry and both together. Subject to certain reservations they have the advantage of being particularly wide in scope. Just because of the considerable number of persons covered (often several millions), they do not easily lend themselves to the making of more detailed classifications. Perhaps certain improvements in the returns of the number of workers insured would make it possible to compute from them an average annual wage. In a larger number of countries these insurance statistics provide data of total wages, for which they are second in importance as a source of information. But these data, too, are subject to certain reservations and limitations, partly similar to those made in the case of production statistics.

This brief review of the principal possibilities of different types of statistics of wages and hours of work shows clearly that they complete one another. Each type being more appropriate for certain of the purposes mentioned above, the best way to serve all the purposes will be to make use of two or more types of statistics rather than to seek to extract all the information required from any one type. A country will not have exhausted its possibilities of statistical information so long as it limits itself to one of these types of statistics, to whatever stage of perfection this type may be brought.

However, if such a system of statistics is to render the services it should, it is important that it should be as standardised as possible within one and the same country; for instance, it is very important that the special enquiries and the summary periodical series should be compiled according to a single scheme, capable of ensuring a correspondence between the classifications by industry and occupation, territorial unit, sex and age used in the two types of statistics. The same applies to insurance statistics and to statistics of production, in which at least the industrial classification should correspond as far as possible to that used in the statistics of earnings and rates. Although such standardisation will admittedly encounter very great difficulties, the advantages which would accompany it render it extremely desirable.

The compilation by the more important countries of such a body of statistics would furnish a very abundant mass of statistical information, and the gaps which exist to-day would in large measure be filled. In the international field the utilisation of such material is, however, still dependent upon the comparability of the data between country and country.

It is important, however, to arrive at a common definition of this term. "Comparability", for many misunderstandings have arisen from divergences of view on the point. Taken in its strictest sense, the term signifies that two sets of data are comparable only when the objects to which they refer are absolutely identical except on the point under measurement in the statistics. Thus the wages of the turners of two countries whose wages are measured only if the workers in the two countries whose wages are measured are of the same age, have received the same occupational training, work with similar lathes, are subject to the same methods of remuneration, bear the same responsibilities, and enjoy, as a result of their employment, the same advantages in such matters as insurance, leisure, holidays and other social services. It is obvious that such conditions cannot be realised.

In the international field, if the limits of practical possibility are to be observed, the attempt to obtain absolute identity of the subjects of comparison must be abandoned, and similarity in certain of their essential features must be taken as sufficient. Thus, returning to the example of the turner, in making international comparisons it must suffice to make sure that the term "turner" implies, in the two countries compared, similar work, and that the wage figures collected refer, for instance, only to adult men, excluding young workers. As regards any differences between the workers from various other points of view, it must be recognised that the statistics of wages and hours cannot bring them to light. This will be the task of complementary studies on conditions of work in the countries considered, studies drawing, if necessary, on other statistical series. Incidentally, these differences can to some extent explain the differences in wages shown by the statistics.

From this point of view—the only practicable one, given the present state of national statistics—it becomes very important that the data compared should be equally representative of the conditions prevailing in each country. It would indeed be completely mistaken to compare the wages of country A, which are representative of the main body of workers of the occupation

considered with wages in country B which are representative only of workers employed under exceptionally advantageous or disadvantageous conditions. In the same way it would be a serious error simply to compare minimum rates in country A with actual earnings in country B, or with insured wages in country C; or, again, to compare average wages for large groups consisting in one instance of a simple average and in another of a weighted average.

In short, the comparability of data would seem to depend largely upon equality in the representative character of the figures (rather than upon absolute identity in the subject of measurement), and this is a condition which can be obtained, at any rate within certain limits, through a reasonable standardisation of the statistics.

Be it noted that what is meant here, as throughout the present report, is the standardisation and not the uniformisation of statistics. The international uniformisation of wage statistics—or of any other statistics—is impossible; for, quite apart from differences between the subjects of measurement which have just been emphasised, account would have to be taken also of the fact that the national statistics of each country are developed in their own environment, which partly determines their character and from which it would be vain to attempt to detach them.

Conceived in this way, the work of international standardisation consists primarily in fixing standards for the different points which affect the comparability of data, or rather, their representative character. To the extent that national statistics do or do not approach these standards, their data will within the limits of the standards be comparable or will remain incomparable.

III. — THE WORK OF THE TECHNICAL CONFERENCE OF LABOUR STATISTICIANS

This Conference was held from 27 September to 1 October 1937 at Geneva, under the chairmanship of Mr. Gunnar Jahn, Director of the Central Statistical Office, Norway. Forty members, representing 28 countries were present.

In preparation for this Conference, the Office had prepared a report on the statistics of wages and hours in the different countries, which now forms Section 2 of Part I of this report, and a short note on the origin and history of this question. Proposals for a Draft Convention and a Recommendation drawn up by the Office on

the basis of the recommendations of the Committee of Statistical Experts were also submitted as a basis of discussion. In preparing these proposals, the Office also took account of the state of the existing statistics of wages and hours of work in different countries. The texts as finally adopted by the Technical Conference do not differ fundamentally from those submitted by the Office: the most important change was the addition of a special part referring to agriculture, which in the Office draft took the form of a Recommendation.

The proposed Draft Convention as adopted by the Conference consists of four parts, Part I contains general provisions, Parts II and III relate to the statistics of wages and hours in mining and manufacturing, and Part IV relates to statistics of wages in agriculture. In view of the fact that in certain countries preference is given to the statistics of average earnings and actual hours, while in others preference has been given to statistics of time rates and normal hours, Part II is confined solely to the statistics of the former and Part III solely to statistics of the latter. Some discussion took place as to the relative importance of these two classes of statistics and certain members of the Conference expressed the view that the statistics of earnings and actual hours were more important than statistics of time rates and normal hours, and that some indication of this should appear in the text of the Convention. The Conference decided, however, that both classes of statistics had their uses and that the Convention should provide for both classes on an equal footing. It approved a proposal, however, that in the preamble to the Convention a paragraph should be inserted to the effect that it is desirable that all countries should compile statistics of average earnings and actual hours as provided for in Part II, but that it is nevertheless expedient to draft the Convention in such a way that it might be ratified by countries which cannot ratify this part. Thus the proposal of the Conference was that a member might exclude either Part II relating to earnings and actual hours, or Part III relating to time rates and normal hours, or Part IV relating to agriculture, but it may not exclude both Part II and Part III.

For each of these two parts of the Convention referring to wages in mining and manufacturing industries (Part II and Part III), the Conference adopted provisions regarding the categories of workpeople to be covered, the items to be included in the terms rates and earnings, the classification of the data and the frequency of compilation. On the latter point, it is provided that statistics

shall be compiled in detail at least once every three years, and that they shall be compiled in less detailed form at least once a year.

As regards Part IV, agricultural wages, the provisions are more flexible, in view of the special characteristics of this branch of the subject. The provisions for the compilation of statistics are in less detail than those for wage earners covered by Part II and III, and they make no provision for statistics of hours. It is also provided that the statistics shall be compiled at least once in two years, instead of annually as in the case of the wage earners covered by Parts II and III.

For those branches of the subject, not covered by the proposed Draft Convention but for which the compilation of statistics is considered desirable to supplement the data to be provided under the Convention, a Recommendation was proposed. This Recommendation contains provisions on the subjects of aggregate annual wages-bill, annual earnings per worker, average earnings and their distribution by occupation, etc.

The Conference also drew attention to two questions which it did not discuss in detail but which it considered should be given further consideration before a final draft is submitted to a session of the International Labour Conference. The first of these relates to the inclusion in a Draft Convention of provisions to meet the case of countries to which Article 19 (3) of the Constitution of the Organisation applies; the second relates to the question of including some provision providing for the improvement and amplification of the statistics compiled in pursuance of the Convention.

The proposed Draft Convention and Recommendation as approved by the Technical Conference of Labour Statisticians are given below.

Texts approved by the Technical Conference of Labour Statisticians,
1 October 1937

PROPOSED DRAFT CONVENTION CONCERNING STATISTICS OF WAGES AND HOURS OF WORK

The General Conference of the International Labour Organisation, Having been convened at Geneva by the Governing Body of the International Labour Office, and having met in its Session on 19 , and

Having decided upon the adoption of certain proposals with regard to item which is the on the Agenda of the Session, and

Having determined that these proposals shall take the form of a Draft International Convention, and

Having determined that, although it is desirable that all Members of the Organisation should compile statistics of average earnings and of hours actually worked which comply with the requirements of Part II of this Convention, it is nevertheless expedient that the Convention should be open to ratification by Members which are not in a position to comply with the requirements of that Part,

adopts, this day of , of the year one thousand nine hundred and , the following Draft Convention which may be cited as the Convention, 19 :

PART I: GENERAL PROVISIONS

Article 1

Each Member of the International Labour Organisation which ratifies this Convention undertakes that:

- (a) it will compile at the intervals and in the manner indicated in Parts II, III and IV of this Convention statistics relating to wages and hours of work giving the information specified in the said Parts of this Convention;
- (b) it will publish the data compiled in pursuance of this Convention as promptly as possible and will endeavour to publish data collected at quarterly or more frequent intervals during the succeeding quarter and to publish data collected at intervals of six or twelve months respectively; and
- (c) it will communicate the data compiled in pursuance of this Convention to the International Labour Office at the earliest possible date.

Article 2

1. Any Member which ratifies this Convention may, by a declaration appended to its ratification, exclude from its acceptance of the Convention:

- (a) any one of Parts II, III, or IV; or
- (b) Parts II and IV; or
- (c) Parts III and IV.

2. Any Member which has made such a declaration may at any time cancel that declaration by a subsequent declaration.

3. Every Member for which a declaration made under paragraph 1 of this Article is in force shall indicate each year in its annual report upon the application of this Convention the extent to which any progress has been made with a view to the application of the Part or Parts of the Convention excluded from its acceptance.

Article 3

Nothing in the present Convention imposes any obligation to publish or to reveal particulars which would result in the disclosure of information relating to any individual firm or establishment.

Article 4

1. Each Member which ratifies this Convention undertakes that its competent statistical authority shall, unless it has already obtained the information in some other way, make enquiries relating either to all, or to a representative part, of the wage earners concerned, in order to obtain the information required for the purpose of the statistics which it has undertaken to compile in accordance with this Convention.

2. Nothing in this Convention shall be interpreted as requiring any Member to compile statistics in cases in which, in the absence of compulsory powers for which the laws and regulations of the Member do not provide, it has been found impracticable, after enquiries made in the manner required by paragraph 1 of this article, to obtain the necessary information.

PART II: STATISTICS OF AVERAGE EARNINGS AND OF HOURS ACTUALLY WORKED

Article 5

1. Statistics of average earnings and of hours actually worked shall be compiled for wage earners employed in each of the principal mining and manufacturing industries including building and construction.

2. The statistics of average earnings and of hours actually worked shall be compiled on the basis of data relating either to all establishments or to a representative sample.

3. The statistics of average earnings and of hours actually worked shall:

- (a) give separate figures for each of the principal industries; and
- (b) indicate briefly the scope of the industries or branches of industry for which figures are given.

Article 6

The statistics of average earnings shall include:

- (a) all cash payments and bonuses received from the employer by the persons employed;
- (b) contributions such as social insurance contributions payable by the employed persons and deducted by the employer; and
- (c) taxes payable by the employed persons to a public authority and deducted by the employer.

Article 7

In the case of countries and industries in which allowances in kind, for example in the form of free or cheap housing, food or fuel, form a substantial part of the total remuneration of the wage earners employed, the statistics of average earnings shall be supplemented by particulars of such allowances, together with estimates, so far as practicable, of their money value.

Article 8
The statistics of average earnings shall be supplemented so far as practicable by indications as to the average amount of any family allowances per person employed in the period to which the statistics relate.

Article 9

1. The statistics of average earnings shall relate to average earnings per hour, day, week or other customary period.
2. Where the statistics of average earnings relate to average earnings per day, week or other customary period, the statistics of actual hours shall relate to the same period.

Article 10

1. The statistics of average earnings and of hours actually worked shall be compiled once every year and where possible at shorter intervals.
2. Once every three years and where possible at shorter intervals the statistics of average earnings and, so far as practicable, the statistics of hours actually worked shall be supplemented by separate figures for each sex and for adults and for juveniles; provided that it shall not be necessary to publish these separate figures in the case of industries in which all but an insignificant number of the wage earners belong to the same sex or age category.

Article 11

Where the statistics of average earnings and of hours actually worked relate not to the whole country but to certain regions or to certain towns or industrial centres, these regions, towns or centres shall as far as practicable be indicated.

Article 12

1. Index numbers showing the general movement of earnings per hour and where possible per day, week or other customary period shall be compiled at as frequent and as regular intervals as possible on the basis of the statistics compiled in pursuance of this Part of this Convention.
2. In compiling such index numbers due account shall be taken *inter alia* of the relative importance of the different industries.
3. In publishing such index numbers indications shall be given as to the methods employed in their construction.

PART III: STATISTICS OF TIME RATES OF WAGES AND OF NORMAL HOURS OF WORK

Article 13

1. Statistics of time rates of wages and of normal hours of work shall be compiled for wage earners employed in a representative selection of the principal mining and manufacturing industries, including building and construction.
2. For the purpose of this Part of this Convention the term "normal hours of work" means the number of hours per day, week or other period in excess of which overtime rates become effective.

Article 14

1. The statistics of time rates of wages and of normal hours of work shall show the rates and hours:
 - (a) fixed by or in pursuance of laws or regulations, collective agreements or arbitral awards;
 - (b) ascertained from organisations of employers and workpeople, from joint bodies, or from other appropriate sources of information, in cases where rates and hours are not fixed by or in pursuance of laws or regulations, collective agreements or arbitral awards.
2. The statistics of time rates of wages and of normal hours of work shall indicate the nature and source of the information from which they have been compiled and whether it relates to rates or hours fixed by or in pursuance of laws or regulations, collective agreements or arbitral awards, or to rates or hours fixed by arrangement between employers and wage earners individually.

3. When rates of wages are described as minimum (other than statutory minimum) rates, standard rates, typical rates, or current rates, or by similar terms, the terms used shall be explained.

Article 15

1. The statistics of time rates of wages and of normal hours of work shall give:
 - (a) at intervals of not more than three years, separate figures for the principal occupations in a wide and representative selection of the different industries; and
 - (b) at least once a year, and if possible at shorter intervals, separate figures for the main occupations in the most important of these industries.
2. The data relating to time rates of wages and of normal hours of work shall be presented so far as practicable on the basis of the same occupational classification.
3. Where the sources of information from which the statistics are compiled do not indicate the separate occupations to which the rates or hours apply, but fix varying rates of wages or hours of work for other categories of workers (such as skilled workers, semi-skilled workers and unskilled workers) or fix normal hours of work by categories of undertakings or branches of undertakings, the separate figures shall be given according to these distinctions.
4. Where the categories for which figures are given are not separate occupations, the scope of each category shall, in so far as the necessary particulars are given in the sources of information from which the statistics are compiled, be indicated.

Article 16

Where the statistics of time rates do not give the rates per hour but give rates per day, week, or other customary period:

- (a) the statistics on normal hours shall relate to the same period; and
- (b) the Member shall communicate to the International Labour Office any information appropriate for the purpose of calculating the rates per hour.

Article 17

Where the sources of information from which the statistics are compiled give separate particulars classified by sex and age, the statistics of time rates of wages and of normal hours of work shall give separate figures for each sex and for adults and for juveniles.

Article 18

Where the statistics of time rates of wages and of normal hours of work relate not to the whole country but to certain regions, towns or industrial centres, these regions, towns or centres shall, as far as practicable, be indicated.

Article 19

1. Where the sources of information from which the statistics of time rates of wages are compiled contain such particulars, the statistics shall at intervals not exceeding three years give particulars as to:

- (a) the rates or percentage additions to normal rates paid for overtime;
- (b) the scale of any payments for holidays; and
- (c) the scale of any family allowances.

2. In the case of countries and industries in which allowances in kind, for example in the form of free and cheap housing, food or fuel, form a substantial part of the total remuneration of the wage earners employed, the statistics of time rates of wages shall be supplemented by particulars of such allowances, together with estimates, so far as practicable, of their money value.

3. Where the sources of information from which the statistics of normal hours of work are compiled contain such particulars, the statistics shall, at intervals not exceeding three years, indicate the amount of overtime permitted.

Article 20

1. Index numbers showing the general movement of rates of wages per hour and/or per week, shall be compiled at least once a year on the basis of the statistics compiled in pursuance of this Part of this Convention, supplemented, where necessary, by any other relevant information which may be available (for example, particulars as to changes in piece-work rates of wages).

2. Where only an index number of rates of wages per hour or only an index number of rates of wages per week is compiled, there shall be compiled an index number of changes in normal hours of work constructed on the same basis.

3. In compiling such index numbers due account shall be taken, *inter alia*, of the relative importance of the different industries.

4. In publishing such index numbers indications shall be given as to the methods employed in their construction.

PART IV: STATISTICS OF AGRICULTURAL WAGES

Article 21

1. Statistics of wages shall be compiled in respect of wage earners engaged in agriculture.

2. The statistics of agricultural wages shall:

- (a) be compiled at intervals not exceeding two years;

- (b) give separate figures for each of the principal districts; and
- (c) indicate the nature of the allowances in kind (including housing), if any, by which money wages are supplemented, and, if possible, an estimate of the money value of such allowances.

3. The statistics of agricultural wages shall be supplemented by indications as to:

- (a) the categories of agricultural wage earners to which the statistics relate;
- (b) the nature and source of the information from which they have been compiled; and
- (c) the methods employed in their compilation.

PROPOSED RECOMMENDATION CONCERNING STATISTICS OF WAGES AND HOURS OF WORK

Whereas the Convention on Statistics of Wages and Hours is necessarily limited in scope to statistics which are sufficiently developed to permit of a substantial number of Members entering into definite obligations in respect thereof; and

Whereas it is of special importance that every effort should be made further to improve statistics of wages and hours of work;

The Conference, with a view to completing the provisions of the Statistics of Wages and Hours Convention, recommends that each Member should give effect to the following provision:

1. (1) Statistics of time rates of wages and of normal hours of work and/or statistics of average earnings and of hours actually worked should be compiled in respect of wage earners engaged in transport, commercial or trading establishments, and administrative services.

(2) Statistics of salaries and hours should be compiled for salaried employees, excluding persons holding positions of management.

(3) These statistics should be compiled as far as possible at the intervals specified in the Statistics of Wages and Hours Convention in respect of statistics relating to persons to whom that Convention applies..

2. (1) At least every ten years, statistics of average earnings and of hours actually worked should be compiled for each of the principal occupations in each industry.

(2) These statistics:

- (a) should show the number of workpeople grouped according to the amount of their earnings; and
- (b) should be given by sex and by age groups.

3. (1) Statistics showing the aggregate amount of wages and salaries paid per annum in each of the principal industries in mining and manufacture, including building and construction, and as far as possible for other branches of economic activity, should be compiled regularly and where possible at annual intervals, and distinguishing as far as possible between wages paid to wage earners and salaries paid to salaried employees.

(2) An approximate indication should be given of the extent to which the returns are representative of all employed persons.

4. Statistics showing average annual earnings of workers in each of the principal industries in mining and manufacture, including building and construction, and as far as possible for other branches of economic activity should be compiled at intervals of three years, distinguishing as far as possible between wages paid to wage earners and salaries paid to salaried employees.

5. The statistics of time-rates of wages should so far as possible be accompanied by indications as to the number of workers covered, as well as by any information which may be available as to the relation between the time-rates of wages and actual earnings.

6. The statistics compiled in pursuance of this Recommendation should be published and communicated to the International Labour Office as prescribed by the Statistics of Wages and Hours Convention for the statistics compiled in pursuance thereof.

IV. — NOTE ON THE LIST OF POINTS FOR CONSULTATION OF GOVERNMENTS

The guiding principles for the standardisation of statistics of wages and hours of work enumerated in Section II (3) and the articles drawn up by the International Conference of Labour Statisticians for a Draft Convention and Recommendation given in the previous section provide a basis for enumerating the points on which Governments should be consulted if the Conference decides to proceed with the procedure of a double discussion. It is not therefore necessary to comment at length on these points, which have been drawn up by following closely the suggestions made by the Committee of Statistical Experts in 1935 and the proposals of the Conference of Statisticians for a Draft Convention in 1937.

In the following list of points, all the proposals made by these two bodies concerning the item on the Agenda have been included though they have been rearranged in a somewhat different order.

Two points, however, have been added which were not examined in detail by the Conference of Labour Statisticians, since they are not primarily of a technical character. The Office considers, however, that they should be included in any list of points on which Governments are to be consulted.

The first concerns the desirability of making provision for certain countries in accordance with Article 19 (3) of the constitution of the Organisation. The Conference of Statisticians adopted a resolution to the effect that this point should be considered by the Office, but it made no proposal on the matter.

The article reads as follows:

"In framing any Recommendation or Draft Convention of general application the Conference shall have due regard to those countries in which climatic conditions, or other special circumstances make of industrial organisation, substantially different and shall suggest the modifications, if any, which it considers may be required to meet the case of such countries."

Since it was considered desirable by the Conference of Statisticians to limit the statistics to the mining and manufacturing industries (including building and construction) and agriculture, and also to provide for the compilation of statistics either for the country as a whole or for regions, towns, and the principal industrial centres, it would appear necessary to consider the principal of those countries where such factors as the absence of industrial development, the sparsity of population and difficulties of communication might make the compilation of such statistics difficult or impossible.

The second concerns the desirability of making provision for the improvement and amplification of the provisions of any Convention on the subject. This point also was the subject of a resolution of the Conference of Labour Statisticians which felt that, as in the case of the International Convention relating to Economic Statistics adopted under the auspices of the League of Nations, some provisions should be made for the future development and improvement of the statistics to be compiled. The methods of compiling weighted index numbers and of classifying the data according to some uniform scheme are instances in point.

CONSULTATION OF GOVERNMENTS

The Office submits for the consideration of the Conference the following list of points on which it suggests that Governments should be consulted with a view to the second discussion of the question.

I. — FORM AND SCOPE OF THE REGULATIONS

1. Desirability of the adoption of a Draft Convention and/or one or more Recommendations on statistics of wages and hours of work.
2. Inclusion within the scope of the proposed Draft Convention, of statistics:
 - (a) for the principal mining and manufacturing industries including building and construction, relating to wages and hours of work;
 - (b) for agriculture, relating to wages only.
3. Desirability of making separate provision for:
 - (a) time-rates of wages and normal hours of work;
 - (b) earnings and hours actually worked.
4. Adoption in respect of the two classes of statistics indicated in Point 3 and of the statistics of wages in agriculture of either
 - (a) separate Draft Conventions, or
 - (b) separate parts of a single Draft Convention, with or without provision for excluding one or more parts from acceptance on ratification.
5. Desirability of permitting limitation of the statistics compiled to particular regions, towns or industrial centres.

II. — ITEMS TO BE COVERED BY THE STATISTICS

A. — AVERAGE EARNINGS AND HOURS ACTUALLY WORKED

6. Indications as to the items to be included in average earnings, the value of allowances in kind, and the average amount of family allowances.
7. Indications as to the hours actually worked.

B. — TIME-RATES OF WAGES AND NORMAL HOURS

8. Explanations as to the scope of the different descriptions of time-rates (minimum rates, standard rates, current rates, etc.).
9. Indications as to rates paid for overtime.
10. Indications as to scale of payments for holidays and the scale of family allowances, and indications as to value of allowances in kind.
11. Indications as to normal hours and the amount of overtime permitted.

III. — METHODS OF COLLECTION OF THE DATA

12. Indications as to the sources from which the data on time-rates and normal hours are to be compiled.
13. Indications as to the number, and proportion, of undertakings from which the statistics of earnings and hours actually worked are to be compiled.

IV. — CLASSIFICATION OF THE STATISTICS

14. Indications as to the principal mining and manufacturing industries (including building and construction) covered by the statistics of average earnings and hours actually worked.
15. Indications as to the principal occupations or categories of workers covered by the statistics of time-rates and normal hours.

16. Indications as to the period of time covered by the statistics of wages (per hour, per week, etc.).
17. Desirability of separate statistics for males and females and for adults and juveniles.
18. Desirability of compiling statistics as to average earnings and actual hours for the principal occupations.
19. Desirability of compiling statistics of the aggregate amount of wages paid per annum in the principal mining and manufacturing industries.
20. Desirability of compiling statistics of annual earnings per worker.

V. — FREQUENCY OF COMPILATION OF THE STATISTICS

21. Indications as to the frequency with which the data are to be compiled.
22. Desirability of compiling detailed statistics at long intervals and of summary statistics at shorter intervals.

VI. — INDEX NUMBERS

23. Desirability of compiling index numbers at regular intervals showing the general movement of rates of wages, of normal hours, and of average earnings.
24. Desirability of giving information as to methods of construction (weighting, etc.) of these index numbers.

VII. — SPECIAL PROVISIONS

25. Desirability of making provision for certain countries in accordance with Article 19 (3) of the Constitution of the Organisation.
26. Desirability of making provision for the improvement and amplification of any Convention which may be adopted.

PART II

BASIS FOR A SINGLE AND FINAL DISCUSSION

I. — INTRODUCTION

This part of the Report is designed to enable the Conference, if it should so decide, to proceed at its Twenty-fourth Session to the immediate adoption of international provisions for the compilation of statistics on wages and hours of work in the mining and manufacturing industries and in agriculture. It therefore gives the text of a proposed Draft Convention and a Draft Recommendation submitted by the Office for the consideration of the Conference, together with an explanatory commentary.

In the preparation of its proposals, the Office has not had the benefit of the replies of Governments to a questionnaire on the subject. On the other hand, the Office has been able to have the benefit of the advice not only of its Committee of Statistical Experts but also of a Technical Conference of Labour Statisticians to which all Member States were invited to send representatives. This Conference, in fact, prepared a text for a proposed Draft Convention and a proposed Recommendation which are reproduced on pages 57 and 63 of this Report.

This Conference was, of course, of a preparatory and technical character, but it was attended by delegates from a considerable number of Governments and these represented the statistical authorities who would in fact have to apply the provisions of any Draft Convention. The proposals of the Technical Conference may therefore be regarded as embodying the measures for the compilation of statistics of wages and hours of work which are not only desirable in themselves but also practicable at the present time. In these circumstances, the Office in preparing its proposals for the Conference, has considered that it would be inexpedient to go beyond the recommendations of the Technical Conference, and consequently the text of the proposed Draft Convention now

submitted is that adopted by the Technical Conference of Statisticians with the addition, however, of two Articles, forming a new part (Part V, Miscellaneous Provisions). These are of a non-technical character and therefore did not form part of the Articles drawn up by the Technical Conference, though it drew attention to them in its report to the Governing Body (see Part I, pp. 55-57).

It has, however, been necessary to omit from the Draft Recommendation as submitted by the Office, certain provisions included in the proposals of the Technical Conference. These provisions related to industries and services other than the mining and manufacturing industries and agriculture, and to salaries, and are outside the scope of the question placed on the Agenda of the Conference by the Governing Body. The omission of these points has involved some consequential amendments of a drafting character.

II. — COMMENTARY ON THE TEXTS SUBMITTED BY THE OFFICE TO THE CONFERENCE

PART I. — GENERAL PROVISIONS

Article 1

Each Member of the International Labour Organisation which ratifies this Convention undertakes that:

- (a) it will compile at the intervals and in the manner indicated in Parts II, III and IV of this Convention statistics relating to wages and hours of work giving the information specified in the said Parts of this Convention;
- (b) it will publish the data compiled in pursuance of this Convention as promptly as possible and will endeavour to publish data collected at quarterly or more frequent intervals during the succeeding quarter and to publish data collected at intervals of six or twelve months during the succeeding six or twelve months respectively; and
- (c) it will communicate the data compiled in pursuance of this Convention to the International Labour Office at the earliest possible date.

This is an introductory Article providing that Members which ratify the Convention shall compile, publish and communicate to the International Labour Office the data compiled in pursuance of this Convention.

In the following Articles are laid down the intervals at which the statistics are to be compiled, but as data compiled in the intervals laid down in the Convention would lose a great part of their value if published too long a time after the period to which

they relate, a paragraph is included to the effect that the data will be published as promptly as possible. It is not considered possible or practicable to lay down the period during which the data must be published, but each Member undertakes that it will endeavour to publish the data within certain specified intervals.

Article 2

1. Any Member which ratifies this Convention may, by a declaration appended to its ratification, exclude from its acceptance of the Convention:

- (a) any one of Parts II, III, or IV; or
- (b) Parts II and IV; or
- (c) Parts III and IV.

2. Any Member which has made such a declaration may at any time cancel that declaration by a subsequent declaration.

3. Every Member for which a declaration made under paragraph 1 of this Article is in force shall indicate each year in its annual report upon the application of this Convention the extent to which any progress has been made with a view to the application of the Part or Parts of the Convention excluded from its acceptance.

The reasons for proposing this Article, have been explained in Section III of Part I, of this report which gives an account of the work of the Statisticians Conference. Briefly, the reasons are that it was felt that ratification would be considerably facilitated if countries were enabled to exclude from their acceptance either the part dealing with time rates and normal hours, or the part dealing with average earnings and hours actually worked, in view of the fact that these two parts are to some extent different aspects of the same phenomena and that some countries give preference in their statistics to the one and some to the other. Paragraph 1 provides for this facility. The result is that a country which ratifies must accept (in addition to Part I, General Provisions, and Part V, Miscellaneous Provisions) either Part II alone, or Part III alone, or Parts II and IV, or Parts II and III, or Parts II, III and IV. It cannot, therefore (in addition to Parts I and V), accept Part IV only.

It is felt, however, that this facility to exclude certain parts of the Convention from acceptance when ratifying should be accompanied by some guarantee that countries will take steps towards applying the Parts which they have excluded. A provision is therefore added that countries shall indicate each year in their annual reports the extent to which progress has been made towards applying the excluded parts. By this means, the Office and the Conference will be able to judge how far countries have endeavoured to adapt their statistics to the requirements of all the parts of the Convention.

Article 3

Nothing in the present Convention imposes any obligation to publish or to reveal particulars which would result in the disclosure of information relating to any individual firm or establishment.

The object of this Article is to meet the objection that the compilation of the data in the detail laid down by the Convention might result in the disclosure of information as to wages paid in a particular establishment. Owing to the concentration of an industry or a branch of industry in one or a few undertakings the publication of data for a particular locality or region or a particular industry as provided for later in the Convention might enable the figures for an individual firm to be identified and the proposed text, which is based on a similar article in the International Convention relating to Economic Statistics, is to provide that any data compiled may be published in such a way that the information for any particular establishment would not be disclosed.

Article 4

1. Each Member which ratifies this Convention undertakes that its competent statistical authority shall, unless it has already obtained the information in some other way, make enquiries relating either to all, or to a representative part, of the wage earners concerned, in order to obtain the information required for the purpose of the statistics which it has undertaken to compile in accordance with this Convention.

2. Nothing in this Convention shall be interpreted as requiring any Member to compile statistics in cases in which, in the absence of compulsory powers for which the laws and regulations of the Member do not provide, it has been found impracticable, after enquiries made in the manner required by paragraph 1 of this Article, to obtain the necessary information.

The object of this Article is to meet the case where a country is unable to obtain the data required by this Convention owing, for example, to the refusal of an establishment to communicate the information as to wages and hours, or to an employers' organisation or a workers' organisation to communicate the terms of a collective agreement to which they are parties.

The first paragraph provides that each Member shall make enquiries in order to obtain the information required under the following Articles of the Convention "unless it has already obtained the information in some other way". This clause was added to cover those cases in which the information can be obtained without making enquiries, such as, for example, information obtained from minimum wage laws and regulations, arbitral awards, etc., which are public documents, and information obtained from collective agreements in those cases where such agreements must be deposited with or registered by some public authority or are voluntarily

communicated. It was originally proposed at the Technical Conference of Labour Statisticians that the information to be compiled in pursuance of this Convention should be limited to the cases "for which particulars are obtainable", but this was considered to be too flexible and as not imposing sufficient obligations for countries to take the necessary steps to see if they were in fact obtainable.

The second paragraph of this article provides that when it is impracticable to obtain the information after making the enquiries referred to in paragraph 1, a Member shall not be required to compile statistics in the absence of compulsory powers not provided for in its national legislation. Where a country possesses compulsory powers which require establishments to supply particulars of the earnings of their workpeople, or require employers' and workers' organisations, or employers and workers, to supply particulars of any agreements, collective or individual, concerning wages and hours of work, and to give these particulars in the detail and at the intervals required by this Convention, then the provisions of this paragraph are unnecessary. Such compulsory powers are, however, extremely rare and provisions such as those of this paragraph are therefore essential.

PART II. — STATISTICS OF AVERAGE EARNINGS OF HOURS ACTUALLY WORKED

Article 5

1. Statistics of average earnings and of hours actually worked shall be compiled for wage earners employed in each of the principal mining and manufacturing industries including building and construction.
2. The statistics of average earnings and of hours actually worked shall be compiled on the basis of data relating either to all establishments or to a representative sample.
3. The statistics of average earnings and of hours actually worked shall:
 - (a) give separate figures for each of the principal industries; and
 - (b) indicate briefly the scope of the industries or branches of industry for which figures are given.

This Article contains provisions as to the general scope of the statistics of average earnings and of hours actually worked.

The first paragraph limits the statistics to be compiled to wage earners and to those employed in the principal mining and manufacturing industries, including building and construction. The limitation to wage earners follows from the object of the Convention, which deals with statistics of wages and not salaries.

The limitation by the Conference of Labour Statisticians to the principal mining and manufacturing industries, including building and construction, is due to the fact that the great majority of wage earners is employed in these branches (or in agriculture, which is covered by Part IV of this Convention) and that, as shown by the discussion in Part I of this Report on the practice in different countries, the existing statistics of wages and hours in different countries are chiefly confined to these groups. Statistics relating to various services (commerce, personal services, certain branches of transport, etc.) are as shown in Part I of this Report comparatively undeveloped, and a provision that the statistics should relate to wage earners in all branches of economic activity would not, it was felt, facilitate ratification.

The phrase "mining and manufacturing industries including building and construction" is perhaps rather general; the term "mining" is sufficiently explicit but it was not thought practicable to include in the Convention a definition of "manufacturing industries". The term is one which is frequently used in the statistics of different countries although there are slight differences in the scope of this term. It was felt moreover that it would be better to leave the determination of what are the principal mining and manufacturing industries to the competent authority. It should be noted that by a later paragraph of this Article, countries are required to give separate figures for the principal industries, so that it will be possible to see the scope of the term, as used in the different countries.

The second paragraph of this Article refers to the sources of the data on earnings and actual hours, namely, the establishments in which the wage earners are employed. The data compiled are to relate "either to all establishments or to a representative sample". In most countries, statistics of earnings and hours of work do not cover all firms but only a selection of them. In certain cases, or in certain industries however especially (for example, the coal-mining industry), all, or practically all, undertakings may be covered. In order that the statistics shall be representative of conditions in the industry as a whole, it is provided, however, that where they do not relate to all establishments they shall relate to a "representative sample". By this is meant that the samples shall be so selected that the different categories of establishments, large and small, the different regions in which such establishments exist, etc., shall be adequately covered.

The third paragraph of this Article provides for the compilation of sepa-

rate figures for each of the principal industries.. It was not considered practicable to draw up a list of such industries since the principal industries might differ from country to country according to the degree of economic development. A country with no important mining industries will not be required to give information for these industries. On the whole it was felt that it is better to leave the interpretation of the term "principal industries" to the statistical authorities of each country. It is provided, however, that a brief indication of the scope of each of the industries or branch of industry covered shall be given. The object of this paragraph is not to require an enumeration of the processes or products of each industry or branch but merely to ensure that the description of each industry should be sufficient to give an idea of its scope; e.g. terms such as "metal industry" and "textile industry" cover in fact various and distinct branches, and it is important that the branches covered should be briefly indicated.

Article 6

The statistics of average earnings shall include:

- (a) all cash payments and bonuses received from the employer by the persons employed;
- (b) contributions such as social insurance contributions payable by the employed persons and deducted by the employer; and
- (c) taxes payable by the employed persons to a public authority and deducted by the employer.

This Article is intended to ensure that the scope of the term "average earnings" shall be uniformly defined in the different countries by ensuring that bonuses are included and that certain deductions commonly made by employers shall be included in the earnings. Payments such as social insurance contributions and taxes for which the wage earner is liable are frequently, for convenience of collection or for other reasons, deducted by the employer from the wages due to the workers. These deductions however are part of workers' wages.

This Article refers solely to money earnings; earnings other than money earnings are dealt with in the two following Articles.

Article 7

In the case of countries and industries in which allowances in kind, for example in the form of free or cheap housing, food or fuel, form a substantial part of the total remuneration of the wage earners employed, the statistics of average earnings shall be supplemented by particulars of such allowances, together with estimates, so far as practicable, of their money value.

This Article relates to those additions to earnings which are not in the form of money payments and requires that the statistics

shall be supplemented by indications as to their money value. As these allowances are of little or no importance in certain cases, it provides that such information shall be given in the case of such countries and industries where such allowances "form a substantial part of the total remuneration of the wage earners".

Article 8

The statistics of average earnings shall be supplemented so far as practicable by indications as to the average amount of any family allowances per person employed in the period to which the statistics relate.

This Article relates to the system of family allowances which exists in certain industries and is, in fact, of general application in certain countries. It provides for indications as to the average amount of such allowances per person. In certain cases, however, the allowances are not paid directly by the employer to the wage earners in his establishment but by some other body, for example, a clearing fund, and the payments are met by a levy on the total wages bill of an establishment. In such cases, it would not be possible for the establishment to give the average amount of family allowances per person employed, so the phrase "so far as practicable" is added to allow for such cases.

Article 9

1. The statistics of average earnings shall relate to average earnings per hour, day, week or other customary period.

2. Where the statistics of average earnings relate to average earnings per day, week or other customary period, the statistics of actual hours shall relate to the same period.

The practice in different countries as regards the time unit to which the statistics of average earnings relate differs, as will be seen from table II of Section II of Part I. In some countries, hourly earnings are compiled, in others daily or weekly earnings. It is not considered practicable to lay down a uniform method for each country. What is important, however, is that the statistics of actual hours worked in the case where the statistics of earnings are not hourly earnings shall relate to the same period as those of earnings. Thus, if statistics of earnings are compiled on a weekly basis, the statistics of hours worked must also be compiled on a weekly basis.

Article 10

1. The statistics of average earnings and of hours actually worked shall be compiled once every year and where possible at shorter intervals.

2. Once every three years and where possible at shorter intervals the statistics of average earnings and, so far as practicable, the statistics of hours

actually worked shall be supplemented by separate figures for each sex and for adults and for juveniles; provided that it shall not be necessary to publish these separate figures in the case of industries in which all but an insignificant number of the wage earners belong to the same sex or age category.

This Article deals with the important question of the frequency with which the statistics of Part II of the Convention shall be compiled. It is, of course, desirable that the information should be compiled as frequently as possible, if regular and up-to-date information is to be available, but if the interval is fixed so as to lay an undue burden on statistical offices, or on the establishments which are asked to supply the particulars, ratification of the Convention might be withheld. The Article therefore provides that these data shall be compiled once every year, or where possible at shorter intervals. If data are made available at yearly intervals together with data at more frequent intervals where countries find it possible to do so, a large amount of useful information will become available.

The question of the frequency of compilation of data on earnings and actual hours is, however, bound up with that of the detail in which the data should be compiled. Figures in little detail are likely to be compiled more frequently than those in great detail. No provision has been made in previous Articles for the data to be given separately for males and females, nor separately for adults and juveniles. The first paragraph of this Article, therefore makes no provision for such data in the case of statistics compiled once a year or more frequently.

In view, however, of the importance of compiling statistics of earnings classified by sex and for adults and juveniles the second paragraph provides that such data shall be compiled every three years and where possible at shorter intervals. Hours worked on the other hand, do not always differ to the same extent as earnings as between workers of different age and sex, so the obligation is made more flexible in this respect by the adoption of the words "so far as practicable". Moreover, the proportion of males, females or juveniles might be so small in some industries or branches of industry that the compilation of separate statistics, even at three-yearly intervals, might not be justified; a proviso is therefore added that in such cases, such distinction need not be made.

Since the dividing line between adults and juveniles is drawn differently in different countries and sometimes in different industries in the same country and even sometimes differently for boys and girls, no definition of adult and juvenile is given in the text.

Article 11.

Where the statistics of average earnings and of hours actually worked relate not to the whole country but to certain regions or to certain towns or industrial centres, these regions, towns or centres shall as far as practicable be indicated.

Reference to Part I of this Report on the territorial scope of the statistics shows that in some cases the figures relate to the country as a whole, in others to certain towns or cities, in others to certain industrial centres. In the case of a localised industry such as mining, the statistics do not refer to the whole country but only to the mining areas, while in the case of a non-localised industry, such as building, the statistics are usually representative of the country as a whole. This Article, which should be taken in conjunction with Article 5 (which provides that the statistics shall relate to a representative sample) therefore provides that indications shall be given as to the territorial scope of the statistics.

Article 12

1. Index numbers showing the general movement of earnings per hour and where possible per day, week or other customary period shall be compiled at as frequent and as regular intervals as possible on the basis of the statistics compiled in pursuance of this Part of this Convention.

2. In compiling such index numbers due account shall be taken *inter alia* of the relative importance of the different industries.

3. In publishing such index numbers indications shall be given as to the methods employed in their construction.

The first paragraph of this Article does not make any further provision for the compilation of statistics of earnings and hours worked, but provides for the compilation on the basis of the statistics compiled in pursuance of the preceding Articles of index numbers showing over a period of time the general movement of earnings. A large number of countries compiles index series of this nature, and they are of importance if changes in real earnings or the purchasing power of earnings are to be measured.

Such index numbers are computed by combining the data for the separate industries or districts which are to be compiled in pursuance of previous Articles. Various methods exist for weighting these different series to form a general index number; sometimes the number of workers covered is used with or without distinction of sex, sometimes the total wages paid, sometimes the value of the output. Paragraph 2 leaves the country free to adopt the method of weighting which it considers the most appropriate, but it is provided in a further paragraph (par. 3) that countries shall indicate, when such general index numbers are published, what methods have been used in their compilation.

PART III. — STATISTICS OF TIME RATES AND NORMAL HOURS

The Articles in this part of the Convention (Nos. 13 to 21) refer to time *rates* of wages and *normal hours*. The compilation of statistics on these subjects raises, in some respects, special questions which do not arise in the case of statistics of average earnings and actual hours, so that special Articles are necessary. In other respects, however, where different provisions are not necessary, the Articles are similar to, or identical with, the corresponding Articles of Part II.

Article 13

1. Statistics of time rates of wages and of normal hours of work shall be compiled for wage earners employed in a representative selection of the principal mining and manufacturing industries, including building and construction.

2. For the purpose of this Part of this Convention the term "normal hours of work" means the number of hours per day, week or other period in excess of which overtime rates become effective.

This Article defines the scope of the statistics of time-rates and normal hours. This is identical with that of Part II, viz., the statistics are to cover "wage earners" employed in "the principal mining and manufacturing industries".

In the corresponding Article of Part II relating to statistics of earnings and hours actually worked (Article 5) it is provided that the information shall be compiled "on the basis of data relating either to all undertakings or to a representative sample". In the present Article, however, the phrase "representative selection of the principal . . . industries" is used, on the ground that since the sources of information from which data on time rates and normal hours are drawn are numerous and varied, it would not be practicable to provide that all sources should be used. Moreover, separate time rates of wages are usually fixed for the different occupations in an industry, and it would be impracticable to impose on countries the obligation to compile statistics for the very large number of occupations for which information exists, some of which are of small importance.

The sources of information from which the statistics of time-rates and normal hours are to be compiled are given in the following Article, and a further Article (Article 19) deals with the statistics of rates paid for overtime. These sources, however, may not use the term "normal hours", or may not lay down in precise terms what are to be considered as normal hours, so a second paragraph is added to this Article providing that for the purpose of this Part

of the Convention they shall be those, in excess of which, the overtime rates mentioned in Article 19 are paid. In other words, the effect of this Article taken in conjunction with the following articles is that the statistics showing normal or ordinary time-rates of wages shall also give the normal hours in respect of which such rates are generally paid.

Article 14

1. The statistics of time rates of wages and of normal hours of work shall show the rates and hours:

- (a) fixed by or in pursuance of laws or regulations, collective agreements or arbitral awards;
- (b) ascertained from organisations of employers and workpeople, from joint bodies, or from other appropriate sources of information, in cases where rates and hours are not fixed by or in pursuance of laws or regulations, collective agreements or arbitral awards.

2. The statistics of time rates of wages and of normal hours of work shall indicate the nature and source of the information from which they have been compiled and whether it relates to rates or hours fixed by or in pursuance of laws or regulations, collective agreements or arbitral awards, or to rates or hours fixed by arrangement between employers and wage earners individually.

3. When rates of wages are described as minimum (other than statutory minimum) rates, standard rates, typical rates, current rates, or by similar terms, the terms used shall be explained.

This Article relates to the sources of information from which the statistics of time rates and normal hours are to be drawn. The most important sources are those contained in national laws or regulations, in collective agreements or in arbitral awards and in many countries where conditions of labour are regulated by collective bargaining and machinery exists for the settlement of disputes, these sources will provide a large part of the information as to the time rates and normal hours in force. In cases where such systems are not as fully developed and where individual contracts between employers and workers may be common, it is necessary to provide for other means of obtaining the information if it is to cover a "representative selection" of the principal industries as provided for in the preceding Article. The Article therefore contains an additional sub-paragraph to the effect that where the rates and hours are not fixed in the sources of information given in sub-paragraph (a) they shall be ascertained from other sources. In some industries, rates and hours are recognised or accepted by employers' and workers' organisations without their being embodied in documents of the kind mentioned above, in some cases joint bodies exist, on which employers and workers are represented, which may be able to supply the information, in other cases the employment exchanges

collect data on the rates offered by employers and accepted by workers. The sources available are various, and it is not attempted to enumerate them all; the principal sources only are mentioned together with a provision that countries shall obtain the information from other "appropriate sources".

It is not sufficient, however, to indicate the sources from which countries are to compile this information; it is essential that of the sources the various statistics of wages and normal hours have been compiled, and a paragraph is accordingly added providing for indications of this nature.

It will be seen by reference to the tables given in Part I of the Report that various terms are used in different countries to describe time rates and normal hours. Minimum rates as fixed by laws or regulations are clear, but minimum rates exist which are not fixed by laws or regulations and which may or may not be exceeded in practice. Standard rates, typical rates, current rates, recognised rates, usual rates, predominant rates, are terms found in official statistics, sometimes without explanation of the sense in which these terms are used. In order that the information compiled may be more easily understood, a paragraph is added requiring that these terms shall be explained.

Article 15

1. The statistics of time rates of wages and of normal hours of work shall give:
 - (a) at intervals of not more than three years, separate figures for the principal occupations in a wide and representative selection of the different industries; and
 - (b) at least once a year, and if possible at shorter intervals, separate figures for the main occupations in the most important of these industries.
2. The data relating to time rates of wages and of normal hours of work shall be presented so far as practicable on the basis of the same occupational classification.
3. Where the sources of information from which the statistics are compiled do not indicate the separate occupations to which the rates or hours apply, but fix varying rates of wages or hours of work for other categories of workers (such as skilled workers, semi-skilled workers and unskilled workers) or fix normal hours of work by categories of undertakings or branches of undertakings, the separate figures shall be given according to these distinctions.
4. Where the categories for which figures are given are not separate occupations, the scope of each category shall, in so far as the necessary particulars are given in the sources of information from which the statistics are compiled, be indicated.

This Article provides for the frequency of compilation of statistics of time rates and normal hours. As in the case of average earnings and actual hours, in Part II, Article 10, it provides for two classes of

statistics, one to be compiled at least once a year, and another to be compiled at least every three years.

The sources available for the statistics covered by this Part of the Convention usually give information for separate occupations, and the number of these in the different industries may be extremely large. To compile and publish data for all occupations every year would be a very onerous task which no country has yet undertaken. The yearly statistics are therefore limited to the main occupations in the most important industries. In the statistics compiled at least every three years, on the other hand, the principal occupations in "a wide and representative selection of the different industries" are to be covered. Though the text may be subject to somewhat different interpretation as to the terms "most important industries" and "a wide and representative selection of the different industries", it is considered desirable to leave the interpretation to the different countries, since it is not possible for a Convention to lay down for each country which industries or occupations these terms cover. An important industry in one country may be unimportant in another, and the occupational structure of different industries varies from country to country.

The second paragraph of this Article provides that the occupations for which particulars of time rates are given shall be, so far as practicable, the same as those for which particulars of hours of work are given. This is important since the data on these two subjects are sometimes drawn from independent sources.

It may happen that the sources of information on time rates and normal hours do not give separate particulars for different occupations but refer only to certain categories. An example is that of a collective agreement which fixes separate rates for skilled workers and unskilled workers; or in the case of normal hours, a source of information which may refer only to certain categories of establishments. In these cases it is not possible to compile the data on the basis provided for in the previous paragraphs of this Article, paragraph 3 therefore makes provision for such cases and paragraph 4 provides that if information is also available as to the scope of the non-occupational terms used, this shall be indicated.

Article 16

Where the statistics of time rates do not give the rates per hour but give rates per day, week, or other customary period:

- (a) the statistics on normal hours shall relate to the same period; and
- (b) the Member shall communicate to the International Labour Office any information appropriate for the purpose of calculating the rates per hour.

The form in which time rates of wages are fixed varies considerably. For some occupations rates per hour may be fixed with usually an indication of the number of the normal hours, which may be fixed either per day or per week; sometimes rates per day or per week may be fixed with indications of the number of normal hours per day or per week respectively; rates per fortnight or per month may even be fixed for certain categories of workers. The object of this Article is to provide that, except in cases where the rates given are hourly rates, the statistics on normal hours shall relate to the same period of time as the statistics of time rates. Thus if time rates are fixed per day, the statistics of normal hours shall give the number of hours per day and not per week.

The hour, however, is the only one of these time units which is of a fixed length; it is therefore the most convenient unit in which to compare time rates in different occupations in a country or in the same occupation in different countries, or to compare rates with earnings. It is not always possible to compare hourly rates from the data as to time rates and hours expressed in other periods, without full information as to the scope of the data: a clause is therefore provided that countries shall communicate to the Office any information necessary for the purposes of calculating hourly rates.

Article 17

Where the sources of information from which the statistics are compiled give separate particulars classified by sex and age, the statistics of time rates of wages and of normal hours of work shall give separate figures for each sex and for adults and for juveniles.

This Article deals with the subject of separate data for males and females and for adults and juveniles. In the case of the statistics of earnings and actual hours worked compiled in pursuance of Part II (Article 10) of this Convention it is provided that such distinctions shall be made, at least once every three years, and since these statistics are compiled on the basis of returns from establishments, there is no inherent difficulty in making the distinction. In the case of time rates and normal hours however such a distinction is not always possible, since the sources of information utilised do not always fix separate time rates for these categories and less frequently fix separate normal hours. Where such distinctions are made, however, this Article provides that the available information shall be given. As in the case of the corresponding Article on statistics of earnings and normal hours in Part II (Article 10) no definition is given of the term adults and juveniles.

Article 18

Where the statistics of time rates of wages and of normal hours of work relate not to the whole country but to certain regions, towns or industrial centres, these regions, towns or centres shall, as far as practicable, be indicated.

This Article makes the same provisions in respect of the territorial scope for the statistics of time rates and normal hours as are made in Part II for statistics of average earnings and actual hours (see Article 11).

Article 19

1. Where the sources of information from which the statistics of time rates of wages are compiled contain such particulars, the statistics shall at intervals not exceeding three years give particulars as to:

- (a) the rates or percentage additions to normal rates paid for overtime;
- (b) the scale of any payments for holidays; and
- (c) the scale of any family allowances.

2. In the case of countries and industries in which allowances in kind, for example in the form of free and cheap housing, food or fuel, form a substantial part of the total remuneration of the wage earners employed, the statistics of time rates of wages shall be supplemented by particulars of such allowances together with estimates, so far as practicable, of their money value.

3. Where the sources of information from which the statistics of normal hours of work are compiled contain such particulars, the statistics shall, at intervals not exceeding three years, indicate the amount of overtime permitted.

In addition to providing information on time rates of wages, the sources of information often contain information on factors which may be important in the remuneration of workers. Thus collective agreements or arbitral awards frequently contain information as to the rates for overtime, or hours worked in excess of normal hours, and to the amount of overtime permitted; the right under certain conditions to a holiday with pay, or to an allowance in respect of children may also be granted to workers by collective agreements. Provisions on these, as well as the amount of permitted overtime, are also to be found in national laws and regulations. This Article provides that in such cases the statistics of normal time rates and normal hours shall be accompanied by particulars on these subjects. The information of the kind asked for in this Article does not change very frequently, and in view of this and of the extra burden which the compilation of these details involves, it is provided in paragraphs 1 and 3, that this information shall be required at intervals not exceeding three years. It is not therefore necessary for countries which ratify this part of the Convention, to compile these particulars for the statistics which by the provisions of Article 15 they are required to compile at least every year.

Paragraph 2 of this Article is identical with the corresponding Article of Part II (Article 7) and makes provision for the compila-

tion of information concerning allowances in kind, in those cases where the sources on time rates give such information.

Article 20

1. Index numbers showing the general movement of rates of wages per hour and/or per week, shall be compiled at least once a year on the basis of the statistics compiled in pursuance of this Part of this Convention, supplemented, where necessary, by any other relevant information which may be available (for example, particulars as to changes in piece-work rates of wages).

2. Where only an index number of rates of wages per hour or only an index number of rates of wages per week is compiled, there shall be compiled an index number of changes in normal hours-of work constructed on the same basis.

3. In compiling such index numbers due account shall be taken, *inter alia*, of the relative importance of the different industries.

4. In publishing such index numbers indications shall be given as to the methods employed in their construction.

This Article provides for the compilation of index numbers of wage rates and normal hours and follows closely the corresponding Article of Part II (Article 11) which has already been explained. Paragraph 1 refers not to time rates of wages as in the previous articles of this Part but to rates of wages. Many wage earners are paid on the basis of piece-work price lists, and in the compilation of general index numbers of rates of wages, it is necessary that all available information as to changes in rates of wages should be used. In the textile industry, e.g. a substantial proportion of the workers are paid at piece rates in most countries and their wages are often regulated by percentage additions to or deductions from these rates. Any index number purporting to show changes in the movement of wage rates in the textile industry, or in all industries, would be unsatisfactory if it were based on time rates only. It is therefore provided that for the purposes of this Article, the information compiled on time rates in pursuance of this part of the Convention shall be supplemented where necessary by any other relevant information such as particulars as to changes in piece rates.

Paragraph 2 provides that countries shall compile either index numbers of hourly rates and index numbers of weekly rates, or one of these two series. Changes in weekly rates of wages may be due either to a change in hourly rates, or to a change in weekly hours, or to a change in both. A rise in the hourly rate may be accompanied, for example, by a fall in the weekly rate. If both series of index numbers are compiled, it is possible to trace the changes in weekly rates due to changes in normal hours. A paragraph therefore provides that where countries compile only one of these two series,

an index of normal hours shall also be compiled, thus making it possible to convert the hourly index to a weekly index or vice-versa.

Paragraphs 3 and 4 relating to the importance of the different industries and the methods of construction of the index numbers are identical with the paragraphs 2 and 3 of the corresponding Article on index numbers of earnings in Part II (Article 12).

PART IV. — STATISTICS OF AGRICULTURAL WAGES

Article 21

1. Statistics of wages shall be compiled in respect of wage earners engaged in agriculture.

2. The statistics of agricultural wages shall:

- (a) be compiled at intervals not exceeding two years;
- (b) give separate figures for each of the principal districts; and
- (c) indicate the nature of the allowances in kind (including housing), if any, by which money wages are supplemented, and, if possible, an estimate of the money value of such allowances.

3. The statistics of agricultural wages shall be supplemented by indications as to:

- (a) the categories of agricultural wage earners to which the statistics relate;
- (b) the nature and source of the information from which they have been compiled; and
- (c) the methods employed in their compilation.

This part of the Convention consisting of one Article only relates solely to wages in agriculture. In view of the importance of agriculture in the economy of many countries, and of the practice of many countries in compiling statistics of wages in this field, it is felt that any convention on statistics of wages and hours should contain some provisions as to wages in agriculture.

In view of the special conditions in agriculture and also of the more rudimentary state of the existing statistics on wages, as described on pp. 33-39 of Part I of this Report, the provisions of this Article are much more flexible than those relating to wages in mining and manufacturing industries. The statistics compiled may relate either to rates of wages, or to actual earnings, according to the nature of the information available in each country, and it would not be obligatory on countries ratifying this part of the Convention to publish separate figures in respect of workers of both sexes, and of different age groups. In view of the important part played by allowances in kind in the remuneration of agricultural workers, especially in the form of board and lodging, provision is made for indications to be given as to the nature of these allowances, and if possible, of their estimated money value.

No provision is included as to the compilation of statistics for different categories of agricultural workers in view of the great differences in the nature and conditions of employment in agriculture in the different countries as shown in Part I of this Report. In most countries statistics refer to common categories of workers without indicating the particular work they perform. Where information is given, however, for different categories, a provision is added to the effect that countries are required to indicate these categories. Provision is also made for indications to be given as to the sources of information used and the methods employed in their compilation.

PART V. — MISCELLANEOUS PROVISIONS

Article 22

1. Any Member the territory of which includes large areas in respect of which, by reason of the difficulty of creating the necessary administrative organisation and the sparseness of the population or the stage of economic development of the area, it is impracticable to compile statistics complying with the requirements of this Convention may exclude such areas from the application of this Convention in whole or in part.

2. Each Member shall indicate in its first annual report upon the application of this Convention submitted under Article 22 of the Constitution of the International Labour Organisation any areas in respect of which it proposes to have recourse to the provisions of the present Article and no Member shall, after the date of its first annual report, have recourse to the provisions of the present Article except in respect of areas so indicated.

3. Each Member having recourse to the provisions of the present Article shall indicate in subsequent annual reports any areas in respect of which it renounces the right to have recourse to the provisions of the present Article.

This Article has been drafted by the Office to take account of a resolution adopted by the Technical Conference of Statisticians. It provides that countries may exclude from the scope of their statistics, any areas for which it is impracticable to compile statistics on account of special circumstances, such as the difficulty of creating the necessary administrative machinery, the sparseness of population, or the stage of economic development. The Constitution of the Organisation provides that the Conference in framing any draft convention shall have regard to circumstances of this kind¹. The Convention already provides in Articles 5 and 15 that countries shall base their statistics upon a "represent-

¹ Article 19 (3) of the Constitution of the Organisation is as follows:— In framing any Recommendation or Draft Convention of general application, the Conference shall have due regard to those countries in which the industrial conditions, the imperfect development of industrial organisation, or other special circumstances make the industrial conditions substantially different, and shall suggest the modifications, if any, which it considers may be required to meet the case of such countries.

tative sample" of all establishments in, or a "representative selection of" the principal mining and manufacturing industries and to indicate whether these figures relate to the whole country or to certain towns, regions or industrial centres, but this would hardly permit the exclusion of large stretches of territory in cases where conditions in the areas covered are not typical of conditions in the country as a whole.

Paragraphs 2 and 3 provide for indication to be given in the first annual report on the application of the Convention as to the modifications which a country proposes to apply and for indications in subsequent annual reports as to the extent to which it renounces the right to these modifications. These provisions are similar to those adopted by the 1937 Conference in the Safety Provisions (Building) Draft Convention.

Article 23

1. The Governing Body of the International Labour Office may, after taking such technical advice as it may deem appropriate, communicate to the Members of the Organisation proposals for improving or amplifying the statistics compiled in pursuance of this Convention or for promoting their comparability.
2. Each Member ratifying this Convention undertakes that it will:
 - (a) submit for the consideration of its competent statistical authority any such proposals communicated to it by the Governing Body; and
 - (b) indicate in its annual report upon the application of the Convention the extent to which it has given effect to such proposals.

This Article has been drafted by the Office, on the basis of a resolution adopted by the Technical Conference of Labour Statisticians. As this proposed Draft Convention is the first attempt to provide for international obligations in the field of labour statistics, it was felt that some machinery should be provided, by which the statistics compiled in pursuance thereof, might be improved or amplified. Experience will, no doubt, show in what directions the Convention may be improved. The frequency of compilation, the degree in which they are to be classified, the methods of computing index numbers are matters in the convention which may be developed in the future. Moreover, certain statistics which are at present not provided for in the draft Convention, but only in the recommendation may become suitable for inclusion in a Convention at some future date.

This Article provides that the Governing Body may communicate any such proposals to the Members of the Organisation which undertake to submit them to its competent statistical authority and to inform the Office in their annual reports of the steps they

have taken to give effect to them. It is provided, however, that such proposals shall only be communicated to the Members, after appropriate technical advice has been taken by the Governing Body. It is left to the Governing Body to decide the nature of this advice. In the case of the International Convention relating to Economic Statistics adopted under the auspices of the League of Nations, a special Committee of Statistical Experts was set up for the purpose of developing the statistics to be compiled in pursuance thereof, and a similar procedure may prove desirable in the case of this Convention.

DRAFT RECOMMENDATION

The Draft Recommendation covers certain branches of the subject not provided for in the Convention but for which the compilation of statistics is desirable in order to complete the statistics to be compiled in pursuance of the Convention.

Paragraph 1. — This paragraph refers to statistics of earnings and of hours actually worked by *occupations*. The Draft Convention (Part II) provides that such statistics shall be compiled only for different *industries*, distinguishing between males and females, and adults and juveniles; it makes no provision for statistics as to earnings and hours actually worked by workers in the different occupations. The compilation of such statistics is a task of considerable magnitude both for the establishments which are asked to supply the data and for the statistical offices which compile them, and as will be seen from the analysis in Section II of Part I of this Report, few countries undertake the compilation of regular statistics of this nature. The Recommendation provides that such data should be collected at least once every ten years.

In addition to a classification by sex and age group, the Recommendation provides for a form of classification not provided for in the draft Convention, which speaks only of "average earnings" for all the workers in a particular group. In addition to the average, it is also possible to compile statistics of the distribution of earnings; i.e. how many workers have earnings falling within defined limits. Information of this kind is already compiled by a few countries and it is desirable that it should be extended in view of the light it throws on the level of wages.

Paragraph 2. — This paragraph covers an aspect of the subject, not mentioned in the Draft Convention. The term "statistics of wages", part of the item on the Agenda of the Conference, has there been interpreted to mean "statistics of wages per worker". This, it is true, is the general sense in which the term is understood especially when used in conjunction with hours of work. There is however another sense in which the term is used, viz. that of the total amount of wages paid in the course of a given period (usually a year) to all the workers in a given industry or in all industries. Statistics of this kind are now compiled in many countries and an analysis of them and their scope is given in Section II of Part I of this Report. The value of such data, collected at say annual intervals, is in showing the changes in the purchasing power of the workers as a whole. The aggregate wages bill of an industry is also used in many countries as a means of measuring that part of the costs of production which goes in labour.

The first section of this paragraph provides for the compilation of such statistics at regular intervals, if possible annually.

The second section of the paragraph provides for information as to the degree of representativeness of the figures. Statistics of this kind are rarely complete; even when obtained by compulsory powers, as is the case in some countries, establishments of small importance are often excluded; and when the returns are voluntary, certain establishments do not furnish the information. It is therefore desirable when any statistics of this kind are published that indications shall be given as to how far they are representative of all persons employed in the industry.

Paragraph 3. — This paragraph refers to "average annual earnings" as distinct from "average earnings per pay period" as provided for in Part II of the Convention and "aggregate annual earnings of all workers" as provided for in paragraph 3 above. Statistics of average earnings per worker give no information as to the total amount received by a worker in the course of a year, since he may have failed to draw these wages owing to sickness, accident, unemployment or other causes for a part of the year.

Few countries compile data of this kind; and their compilation involves difficulties especially on account of the labour turnover which occurs in the course of a year. It is desirable however that further information on the subject should be available as it is of great interest to know not only how much a worker earns

per week or other pay period, but how much he receives per year, a period which corresponds to that of his expenditure.

Paragraph 4. — The object of this paragraph is twofold. Its first object is to provide information as to the number of workers covered by the statistics of time rates which are compiled in pursuance of Part III of the Convention. Such particulars are not usually given in the sources of information from which the time rates are compiled. Other sources, however, may exist, e.g. the population census, statistics derived from schemes of social insurance, which give indications as to the numbers in the different occupations to which the time rates relate. Such information is of value for many purposes and may be used for the compilation of the index numbers of time rates in different industries, or in industry as a whole, provided for in Article 20 of the Convention.

The second object of the section is to provide indications as to how far time rates correspond to actual earnings. The Convention contains a provision that the various terms used in defining time rates shall be defined. A "minimum" time rate, for example, may be exceeded in practice and may not thus be representative of the rates actually paid in an occupation. It was for this reason that some members of the Conference of Labour Statisticians expressed reservations as to the practical value of statistics of time rates. By this section of the paragraph, countries are recommended to give, in addition to the statistics of time rates, any information which may be available as to the relation between time rates and the earnings actually paid to the workers.

Paragraph 5. — This is a general provision referring to the publication of the statistics compiled in pursuance of this Recommendation.

PROPOSED DRAFT CONVENTION CONCERNING STATISTICS OF WAGES AND HOURS OF WORK

The General Conference of the International Labour Organisation,

Having been convened at Geneva by the Governing Body of the International Labour Office, and having met in its Session on 19 , and

Having decided upon the adoption of certain proposals with regard to which is the item on the Agenda of the Session, and

Having determined that these proposals shall take the form of a Draft International Convention, and

Having determined that, although it is desirable that all Members of the Organisation should compile statistics of average earnings and of hours actually worked which comply with the requirements of Part II of this Convention, it is nevertheless expedient that the Convention should be open to ratification by Members which are not in a position to comply with the requirements of that Part,

Adopts, this day of of the year one thousand nine hundred and , the following Draft Convention which may be cited as the Convention, 19 :

PART I. — GENERAL PROVISIONS

Article I

Each Member of the International Labour Organisation which ratifies this Convention undertakes that:

- (a) it will compile at the intervals and in the manner indicated in Parts II, III and IV of this Convention statistics relating to wages and hours of work giving the information specified in the said Parts of this Convention;
- (b) it will publish the data compiled in pursuance of this Convention as promptly as possible and will endeavour to publish data collected at quarterly or more frequent intervals

AVANT-PROJET DE CONVENTION CONCERNANT LES STATISTIQUES DES SALAIRES ET DES HEURES DE TRAVAIL

La Conférence générale de l'Organisation internationale du Travail, convoquée à Genève par le Conseil d'administration du Bureau international du Travail, et s'y étant réunie le en sa session,

Après avoir décidé d'adopter diverses propositions relatives à le point à l'ordre du jour de la session, question qui constitue d'un projet de convention internationale,

Après avoir décidé que ces propositions prendraient la forme Membres de l'Organisation compilent des statistiques que tous les moyens et des heures de travail effectuées conformes aux prescriptions de la partie II de la présente Convention, il est toutefois opportun que la Convention soit ouverte à la ratification des Membres qui ne sont pas en mesure de se conformer aux prescriptions de ladite partie,

Adopte ce cent trente-jour de mil neuf cent quatre-vingt-dix-neuf, le projet de convention ci-après qui sera dénommé: Convention

PARTIE I. — DISPOSITIONS GÉNÉRALES

Article 1

Tout Membre de l'Organisation internationale du Travail qui ratifie la présente convention s'engage:

- a) à compiler, aux intervalles et selon les dispositions fixés dans les parties II, III et IV de la présente Convention, des statistiques relatives aux salaires et aux heures de travail, donnant les informations spécifiées dans les parties susmentionnées de la Convention;
- b) à publier aussi rapidement que possible les données compilées en application de la présente Convention, et à s'efforcer de publier les données recueillies à intervalle trimestriel ou plus

during the succeeding quarter and to publish data collected at intervals of six or twelve months during the succeeding six or twelve months respectively; and

- (c) it will communicate the data compiled in pursuance of this Convention to the International Labour Office at the earliest possible date.

Article 2

1. Any Member which ratifies this Convention may, by a declaration appended to its ratification, exclude from its acceptance of the Convention:

- (a) any one of Parts II, III, or IV; or
- (b) Parts II and IV; or
- (c) Parts III and IV.

2. Any Member which has made such a declaration may at any time cancel that declaration by a subsequent declaration.

3. Every Member for which a declaration made under paragraph 1 of this Article is in force shall indicate each year in its annual report upon the application of this Convention the extent to which any progress has been made with a view to the application of the Part or Parts of the Convention excluded from its acceptance.

Article 3

Nothing in the present Convention imposes any obligation to publish or to reveal particulars which would result in the disclosure of information relating to any individual firm or establishment.

Article 4

1. Each Member which ratifies this Convention undertakes that its competent statistical authority shall, unless it has already obtained the information in some other way, make enquiries relating either to all, or to a representative part, of the wage earners concerned, in order to obtain the information required for the purpose of the statistics which it has undertaken to compile in accordance with this Convention.

2. Nothing in this Convention shall be interpreted as requiring any Member to compile statistics in cases in which, in the absence of compulsory powers for which the laws and regulations of the Member do not provide, it has been found impracticable, after enquiries made in the manner required by paragraph 1 of this Article, to obtain the necessary information.

fréquemment, au cours du trimestre suivant, et les données recueillies à intervalle semestriel ou annuel au cours du semestre ou de l'année qui suit, respectivement;

c) à communiquer dans le plus bref délai possible au Bureau international du Travail les données compilées en application de la présente Convention.

Article 2

1. Tout Membre qui ratifie la présente Convention peut, par une déclaration annexée à sa ratification, exclure de l'engagement résultant de sa ratification:

- a) ou l'une des parties II, III ou IV,
- b) ou les parties II et IV,
- c) ou les parties III et IV.

2. Tout Membre qui aura fait une telle déclaration pourra l'annuler en tout temps par une déclaration ultérieure.

3. Tout Membre à l'égard duquel est en vigueur une déclaration faite conformément au paragraphe 1 du présent article, doit indiquer chaque année, dans son rapport sur l'application de la présente Convention, dans quelle mesure un progrès quelconque a été réalisé en vue de l'application de la partie ou des parties de la Convention exclues de son engagement.

Article 3

Aucune disposition de la présente Convention n'impose l'obligation de publier ou de donner connaissance des chiffres qui entraîneraient la divulgation de renseignements relatifs à une entreprise ou établissement particulier quelconque.

Article 4

1. Tout Membre qui ratifie la présente convention s'engage à ce que son service de statistique compétent entreprenne des enquêtes portant soit sur l'ensemble, soit sur une fraction représentative des ouvriers considérés, afin d'obtenir les informations requises en vue des statistiques qu'il s'engage à compiler conformément à cette convention, à moins que ce service n'ait déjà obtenu ces informations d'une autre manière.

2. Rien dans la présente convention ne doit être interprété comme une obligation pour un Membre de compiler des statistiques lorsque, faute de disposer de contrainte légale, ce Membre ne s'est pas trouvé pratiquement en mesure d'obtenir les informations nécessaires à la suite des enquêtes effectuées conformément au paragraphe 1 du présent article.

PART II. — STATISTICS OF AVERAGE EARNINGS AND OF HOURS ACTUALLY WORKED

Article 5

1. Statistics of average earnings and of hours actually worked shall be compiled for wage earners employed in each of the principal mining and manufacturing industries including building and construction.

2. The statistics of average earnings and of hours actually worked shall be compiled on the basis of data relating either to all establishments or to a representative sample.

3. The statistics of average earnings and of hours actually worked shall:

- (a) give separate figures for each of the principal industries; and
- (b) indicate briefly the scope of the industries or branches of industry for which figures are given.

Article 6

The statistics of average earnings shall include:

- (a) all cash payments and bonuses received from the employer by the persons employed;
- (b) contributions such as social insurance contributions payable by the employed persons and deducted by the employer; and
- (c) taxes payable by the employed persons to a public authority and deducted by the employer.

Article 7

In the case of countries and industries in which allowances in kind, for example in the form of free or cheap housing, food or fuel, form a substantial part of the total remuneration of the wage earners employed, the statistics of average earnings shall be supplemented by particulars of such allowances, together with estimates, so far as practicable, of their money value.

Article 8

The statistics of average earnings shall be supplemented so far as practicable by indications as to the average amount of any family allowances per person employed in the period to which the statistics relate.

PARTIE II. — STATISTIQUES DES GAINS MOYENS ET DES HEURES DE TRAVAIL EFFECTUÉES

Article 5

1. Des statistiques sur les gains moyens et les heures de travail effectuées doivent être compilées pour les ouvriers occupés dans chacune des principales branches des mines et de l'industrie manufacturière, y compris le bâtiment et la construction.
2. Les statistiques des gains moyens et des heures de travail effectuées doivent être compilées sur la base des données portant soit sur l'ensemble des entreprises, soit sur un choix représentatif d'entre elles.
3. Les statistiques des gains moyens et des heures de travail effectuées doivent:
 - a) donner des chiffres distincts pour chacune des principales industries;
 - b) donner brièvement la désignation des industries ou branches d'industries pour lesquelles des chiffres sont donnés.

Article 6

Les statistiques des gains moyens doivent comprendre:

- a) tous les paiements en espèces et primes reçus de l'employeur par les personnes occupées;
- b) les contributions telles que les cotisations d'assurance sociale payables par les personnes occupées et retenues par l'employeur;
- c) les impôts payables par les personnes occupées à une autorité publique et retenues par l'employeur.

Article 7

Dans le cas de pays et d'industries où les allocations en nature par exemple sous la forme de logement, nourriture ou combustible gratuits ou à prix réduit constituent une partie importante de la rémunération totale des ouvriers occupés, les statistiques des gains moyens doivent être complétées par des indications sur ces allocations et, dans la mesure du possible, par une estimation de leur valeur en espèces.

Article 8

Les statistiques des gains moyens doivent être complétées, autant que possible, par des indications sur le montant moyen, par personne occupée, de toutes allocations familiales pour la période à laquelle se réfèrent les statistiques.

Article 9

1. The statistics of average earnings shall relate to average earnings per hour, day, week or other customary period.
2. Where the statistics of average earnings relate to average earnings per day, week or other customary period, the statistics of actual hours shall relate to the same period.

Article 10

1. The statistics of average earnings and of hours actually worked shall be compiled once every year and where possible at shorter intervals.
2. Once every three years and where possible at shorter intervals the statistics of average earnings and, so far as practicable, the statistics of hours actually worked shall be supplemented by separate figures for each sex and for adults and for juveniles; provided that it shall not be necessary to publish these separate figures in the case of industries in which all but an insignificant number of the wage earners belong to the same sex or age category.

Article 11

Where the statistics of average earnings and of hours actually worked relate not to the whole country but to certain regions or to certain towns or industrial centres, these regions, towns or centres shall as far as practicable be indicated.

Article 12

1. Index numbers showing the general movement of earnings per hour and where possible per day, week or other customary period shall be compiled at as frequent and as regular intervals as possible on the basis of the statistics compiled in pursuance of this Part of this Convention.
2. In compiling such index numbers due account shall be taken *inter alia* of the relative importance of the different industries.
3. In publishing such index numbers indications shall be given as to the methods employed in their construction.

Article 9

1. Les statistiques des gains moyens doivent porter sur les gains moyens calculés par heure, par jour, par semaine ou par toute autre période en usage.

2. Lorsque les statistiques des gains moyens portent sur les gains moyens calculés par jour, par semaine ou par toute autre période en usage, les statistiques sur les heures de travail effectuées doivent porter sur la même période.

Article 10

1. Les statistiques des gains moyens et des heures de travail effectuées doivent être compilées une fois par année et autant que possible à des intervalles plus fréquents.

2. Une fois tous les trois ans et si possible à intervalles plus fréquents, les statistiques des gains moyens et dans la mesure du possible, les statistiques des heures de travail effectuées doivent être complétées par des chiffres distincts pour chaque sexe, pour les adultes et pour les jeunes gens. Toutefois, il n'est pas nécessaire de publier ces chiffres distincts dans le cas des industries où tous les ouvriers, à l'exception d'un nombre insignifiant d'entre eux, appartiennent au même sexe ou à la même catégorie d'âge.

Article 11

Lorsque les statistiques des gains moyens et des heures de travail effectuées ne se rapportent pas au pays entier, mais seulement à certaines régions, villes ou centres industriels, ces régions, villes ou centres, doivent autant que possible, être indiqués.

Article 12

1. Des nombres-indices montrant le mouvement général des gains par heure et, si possible, par jour, par semaine ou par autre période envisagée, doivent être établis à intervalles aussi fréquents et réguliers que possible sur la base des statistiques compilées en application de la présente partie de la présente convention.

2. Pour l'établissement de ces nombres-indices, il doit être dûment tenu compte, entre autres éléments, de l'importance relative des différentes industries.

3. Dans la publication de ces nombres-indices des indications doivent être données sur la méthode employée pour leur établissement.

PART III. — STATISTICS OF TIME RATES OF WAGES AND OF NORMAL HOURS OF WORK

Article 13

1. Statistics of time rates of wages and of normal hours of work shall be compiled for wage earners employed in a representative selection of the principal mining and manufacturing industries, including building and construction.

2. For the purpose of this Part of this Convention the term "normal hours of work" means the number of hours per day, week or other period in excess of which overtime rates become effective.

Article 14

1. The statistics of time rates of wages and of normal hours of work shall show the rates and hours:

- (a) fixed by or in pursuance of laws or regulations, collective agreements or arbitral awards;
- (b) ascertained from organisations of employers and work-people, from joint bodies, or from other appropriate sources of information, in cases where rates and hours are not fixed by or in pursuance of laws or regulations, collective agreements or arbitral awards.

2. The statistics of time rates of wages and of normal hours of work shall indicate the nature and source of the information from which they have been compiled and whether it relates to rates or hours fixed by or in pursuance of laws or regulations, collective agreements or arbitral awards, or to rates or hours fixed by arrangement between employers and wage earners individually.

3. When rates of wages are described as minimum (other than statutory minimum) rates, standard rates, typical rates, or current rates, or by similar terms, the terms used shall be explained.

Article 15

1. The statistics of time rates of wages and of normal hours of work shall give:

- (a) at intervals of not more than three years, separate figures for the principal occupations in a wide and representative selection of the different industries; and
- (b) at least once a year, and if possible at shorter intervals, separate figures for the main occupations in the most important of these industries.

PARTIE III. — STATISTIQUES DES TAUX DE SALAIRES AU TEMPS ET DES HEURES DE TRAVAIL NORMALES

Article 13

1. Des statistiques sur les taux de salaires au temps et sur les heures de travail normales doivent être compilées pour les ouvriers occupés dans un choix représentatif des principales industries minières et manufacturières, y compris le bâtiment et la construction.

2. Pour l'application de cette partie de la présente convention l'expression « heures de travail normales » signifie le nombre d'heures par jour, par semaine ou par toute autre période au delà duquel le taux des heures supplémentaires devient applicable.

Article 14

1. Les statistiques des taux de salaires au temps et des heures de travail normales doivent donner les taux et les heures:

- a) fixés par la législation, par accords collectifs, par sentences arbitrales, ou en application de ceux-ci;
- b) obtenus des organisations d'employeurs et de travailleurs, des organismes mixtes ou d'autres sources d'information appropriées lorsque les taux et les heures ne sont pas fixés par la législation, par accords collectifs; par sentences arbitrales ou en application de ceux-ci.

2. Les statistiques des taux de salaires au temps et des heures de travail normales doivent indiquer la nature et la source des informations sur lesquelles elles reposent, et indiquer notamment, s'il s'agit de taux ou d'heures fixés par la législation, par accords collectifs, par sentences arbitrales ou en application de ceux-ci, ou bien de taux ou d'heures fixés par accords individuels entre employeurs et travailleurs.

3. Lorsqu'il s'agit de taux de salaires désignés comme minima (autres que les minima légaux), standard, typiques ou courants, ou par des termes analogues, le sens de ces termes doit être expliqué.

Article 15

1. Les statistiques de taux de salaires au temps et des heures de travail normales doivent donner:

- a) à des intervalles ne dépassant pas 3 années des chiffres distincts pour les principales professions dans un choix large et représentatif des diverses industries, et,
- b) au moins une fois par année et si possible à des intervalles plus fréquents, des chiffres distincts pour les principales professions des plus importantes de ces industries.

2. The data relating to time rates of wages and of normal hours of work shall be presented so far as practicable on the basis of the same occupational classification.

3. Where the sources of information from which the statistics are compiled do not indicate the separate occupations to which the rates or hours apply, but fix varying rates of wages or hours of work for other categories of workers (such as skilled workers, semi-skilled workers and unskilled workers) or fix normal hours of work by categories of undertakings or branches of undertakings, the separate figures shall be given according to these distinctions.

4. Where the categories for which figures are given are not separate occupations, the scope of each category shall, in so far as the necessary particulars are given in the sources of information from which the statistics are compiled, be indicated.

Article 16

Where the statistics of time rates do not give the rates per hour but give rates per day, week, or other customary period:

- (a) the statistics on normal hours shall relate to the same period; and
- (b) the Member shall communicate to the International Labour Office any information appropriate for the purpose of calculating the rates per hour.

Article 17

Where the sources of information from which the statistics are compiled give separate particulars classified by sex and age, the statistics of time rates of wages and of normal hours of work shall give separate figures for each sex and for adults and for juveniles.

Article 18

Where the statistics of time rates of wages and of normal hours of work relate not to the whole country but to certain regions, towns or industrial centres, these regions, towns or centres shall, as far as practicable, be indicated.

Article 19

1. Where the sources of information from which the statistics of time rates of wages are compiled contain such particulars, the

2. Les données se rapportant aux taux de salaires au temps, et aux heures de travail normales seront présentées dans la mesure du possible sur la base de la même classification professionnelle.

3. Des chiffres distincts doivent être donnés, pour chaque cas, lorsque les sources d'information d'après lesquelles les statistiques sont compilées n'indiquent pas les professions distinctes auxquelles s'appliquent les taux ou les heures, mais fixent différents taux de salaires ou heures de travail pour d'autres catégories de travailleurs (telles que ouvriers qualifiés, mi-qualifiés ou non qualifiés), ou fixent les heures de travail normales par catégorie ou branche d'entreprise.

4. Lorsque les catégories pour lesquelles des données sont fournies ne sont pas des professions distinctes, la désignation de chaque catégorie doit être indiquée dans la mesure où les indications nécessaires sont fournies dans les sources d'information d'après lesquelles les statistiques sont compilées.

Article 16

Lorsque les statistiques des taux de salaires au temps ne donnent pas les taux par heure, mais donnent les taux par jour, par semaine ou par autre période en usage:

- a) les statistiques des heures de travail normales doivent se rapporter à la même période;
- b) le Membre doit fournir au Bureau international du Travail toute information utile en vue du calcul des taux par heure.

Article 17

Lorsque les sources d'information d'après lesquelles les statistiques sont compilées fournissent des données distinctes classées par sexe et par âge, les statistiques des taux de salaires au temps et des heures de travail normales doivent donner des chiffres distincts pour chaque sexe et pour les adultes et les jeunes gens.

Article 18

Lorsque les statistiques des taux de salaires au temps et des heures de travail normales ne se rapportent pas au pays entier, mais seulement à certaines régions, villes ou centres industriels, ces régions, villes ou centres doivent, autant que possible, être indiquées.

Article 19

1. Lorsque les sources d'information d'après lesquelles les statistiques des taux de salaires au temps sont compilées contiennent

statistics shall at intervals not exceeding three years give particulars as to:

- (a) the rates or percentage additions to normal rates paid for overtime;
- (b) the scale of any payments for holidays; and
- (c) the scale of any family allowances.

2. In the case of countries and industries in which allowances in kind, for example in the form of free and cheap housing, food or fuel, form a substantial part of the total remuneration of the wage earners employed, the statistics of time rates of wages shall be supplemented by particulars of such allowances, together with estimates, so far as practicable, of their money value.

3. Where the sources of information from which the statistics of normal hours of work are compiled contain such particulars, the statistics shall, at intervals not exceeding three years, indicate the amount of overtime permitted.

Article 20

1. Index numbers showing the general movement of rates of wages per hour and/or per week, shall be compiled at least once a year on the basis of the statistics compiled in pursuance of this Part of this Convention, supplemented, where necessary, by any other relevant information which may be available (for example, particulars as to changes in piece-work rates of wages).

2. Where only an index number of rates of wages per hour or only an index number of rates of wages per week is compiled, there shall be compiled an index number of changes in normal hours of work constructed on the same basis.

3. In compiling such index numbers due account shall be taken, *inter alia*, of the relative importance of the different industries.

4. In publishing such index numbers indications shall be given as to the methods employed in their construction.

PART IV. — STATISTICS OF AGRICULTURAL WAGES

Article 21

1. Statistics of wages shall be compiled in respect of wage earners engaged in agriculture.

des indications à ce sujet, ces statistiques doivent, à des intervalles ne dépassant pas trois ans, donner des indications sur:

- a) les taux ou le pourcentage d'augmentation des taux normaux payés pour les heures supplémentaires;
- b) les barèmes des paiements éventuels pour congés;
- c) les barèmes des allocations familiales éventuelles.

2. Dans les cas de pays et d'industries où des allocations en nature, par exemple sous la forme de logement, nourriture ou combustible gratuits ou à prix réduits constituent une partie importante de la rémunération totale des ouvriers occupés, les statistiques des taux de salaires doivent être complétées par des indications sur ces allocations et dans la mesure du possible par une estimation de leur valeur en espèces.

3. Lorsque les sources d'information d'après lesquelles les statistiques des heures de travail normales sont compilées contiennent des indications à ce sujet, ces statistiques doivent, à des intervalles ne dépassant pas trois ans, indiquer le nombre d'heures supplémentaires permises.

Article 20

1. Des nombres-indices montrant le mouvement général des taux de salaires par heure ou par semaine doivent être établis au moins une fois par année, sur la base des statistiques compilées en application de cette partie de la présente convention et, complétés en cas de besoin par toute autre information pertinente disponible (par exemple, indications sur les variations dans les taux de salaires aux pièces).

2. Lorsqu'un seul nombre-indice des taux de salaires, soit par heure, soit par semaine, est établi, un nombre-indice des variations des heures de travail normales devra être établi sur la même base.

3. Pour l'établissement de ces nombres-indices, il doit être dûment tenu compte, entre autres éléments, de l'importance relative des différentes industries.

4. Dans la publication de ces nombres-indices des indications doivent être données sur la méthode employée pour leur établissement.

PARTIE IV. --- STATISTIQUES DES SALAIRES AGRICOLES

Article 21

1. Des statistiques de salaires concernant les ouvriers occupés dans l'agriculture doivent être compilées.

2. The statistics of agricultural wages shall:
 - (a) be compiled at intervals not exceeding two years;
 - (b) give separate figures for each of the principal districts; and
 - (c) indicate the nature of the allowances in kind (including housing), if any, by which money wages are supplemented, and, if possible, an estimate of the money value of such allowances.
3. The statistics of agricultural wages shall be supplemented by indications as to:
 - (a) the categories of agricultural wage earners to which the statistics relate;
 - (b) the nature and source of the information from which they have been compiled; and
 - (c) the methods employed in their compilation.

PART V. — MISCELLANEOUS PROVISIONS

Article 22

1. Any Member the territory of which includes large areas in respect of which, by reason of the difficulty of creating the necessary administrative organisation and the sparseness of the population or the stage of economic development of the area, it is impracticable to compile statistics complying with the requirements of this Convention may exclude such areas from the application of this Convention in whole or in part.

2. Each Member shall indicate in its first annual report upon the application of this Convention submitted under Article 22 of the Constitution of the International Labour Organisation any areas in respect of which it proposes to have recourse to the provisions of the present Article and no Member shall, after the date of its first annual report, have recourse to the provisions of the present Article except in respect of areas so indicated.

3. Each Member having recourse to the provisions of the present Article shall indicate in subsequent annual reports any areas in respect of which it renounces the right to have recourse to the provisions of the present Article.

Article 23

1. The Governing Body of the International Labour Office may, after taking such technical advice as it may deem appropriate, communicate to the Members of the Organisation proposals for

2. Les statistiques des salaires agricoles doivent:
- a) être compilées à des intervalles ne dépassant pas deux ans;
 - b) donner des chiffres distincts pour chacune des principales régions;
 - c) indiquer, le cas échéant, le caractère des allocations en nature (y compris le logement) qui complètent les salaires en espèces et autant que possible une estimation de la valeur en espèces de ces allocations.

3. Les statistiques des salaires agricoles doivent être complétées par des informations sur:

- a) les catégories d'ouvriers agricoles auxquelles les statistiques se rapportent;
- b) la nature et la source des informations sur lesquelles elles reposent;
- c) les méthodes utilisées pour leur compilation.

PARTIE V. — DISPOSITIONS DIVERSES

Article 22

1. Lorsque le territoire d'un Membre comprend de vastes régions où, en raison des difficultés de créer les organismes administratifs nécessaires ou en raison du caractère clairsemé de la population ou encore de l'état de développement économique, l'autorité compétente estime impraticable de compiler des statistiques en application des dispositions de la présente convention, elle peut exempter lesdites régions de l'application de la convention en tout ou en partie.

2. Tout Membre doit indiquer, dans son premier rapport annuel à soumettre sur l'application de la présente convention, en vertu de l'article 22 de la Constitution de l'Organisation internationale du Travail, toute région pour laquelle il se propose d'avoir recours aux dispositions du présent article. Par la suite, aucun Membre ne pourra recourir aux dispositions du présent article, sauf en ce qui concerne les régions qu'il aurait ainsi indiquées.

3. Tout Membre recourant aux dispositions du présent article doit indiquer, dans les rapports annuels ultérieurs, les régions pour lesquelles il renonce au droit de faire appel auxdites dispositions.

Article 23

1. Le Conseil d'administration du Bureau international du Travail peut, après avoir recueilli les avis techniques qui lui paraîtront appropriés, communiquer aux Membres de l'Organisation des

improving or amplifying the statistics compiled in pursuance of this Convention or for promoting their comparability.

2. Each Member ratifying this Convention undertakes that it will:

- (a) submit for the consideration of its competent statistical authority any such proposals communicated to it by the Governing Body;
- (b) indicate in its annual report upon the application of the Convention the extent to which it has given effect to such proposals.

propositions en vue d'améliorer et de développer les statistiques compilées en application de la présente convention, ou en vue d'arriver à leur comparabilité.

2. Tout Membre qui ratifie la présente convention s'engage:

- a) à soumettre à l'examen de son autorité compétente en matière de statistique toute proposition de ce genre qui lui aura été transmise par le Conseil d'administration;
 - b) à indiquer dans son rapport annuel sur l'application de la convention la mesure dans laquelle il a donné suite à de telles propositions.
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PROPOSED RECOMMENDATION CONCERNING STATISTICS OF WAGES AND HOURS OF WORK

Whereas the Convention on Statistics of Wages and Hours of Work necessarily only includes provisions which a substantial number of Members are in a position to accept as definite obligations; and

Whereas it is of special importance that every effort should be made further to improve statistics of wages and hours of work;

The Conference, with a view to completing the provisions of the Statistics of Wages and Hours Convention, recommends that each Member should give effect to the following provisions:

1. (1) At least once every ten years, the statistics of average earnings and of hours actually worked relating to wage earners employed in the principal mining and manufacturing industries, including building and construction, should give separate figures for each of the principal occupations in each industry.

(2) These statistics:

(a) should show the number of workpeople grouped according to the amount of their earnings; and

(b) should be given by sex and by age groups.

2. (1) Statistics showing the aggregate amount of wages paid per annum in each of the principal industries in mining and manufacture, including building and construction, should be compiled regularly and where possible at annual intervals.

(2) An approximate indication should be given of the extent to which the returns are representative of all employed persons.

3. Statistics showing average annual earnings of workers employed in each of the principal industries in mining and manufacture, including building and construction, should be compiled at intervals not exceeding three years.

PROJET DE RECOMMANDATION CONCERNANT LES STATISTIQUES DES SALAIRES ET DES HEURES DE TRAVAIL

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Attendu que la Convention sur les statistiques des salaires et des heures de travail ne comporte nécessairement que des dispositions qu'un nombre important de Membres sont en mesure d'accepter comme une obligation déterminée,

Attendu qu'il est particulièrement important que tout effort soit tenté pour améliorer les statistiques des salaires et des heures de travail;

La Conférence, dans le but de compléter les dispositions de la Convention sur les statistiques des salaires et des heures de travail, recommande à chaque Membre de donner effet aux dispositions suivantes:

1. (1) Au moins une fois tous les dix ans les statistiques des gains moyens et des heures de travail effectuées se rapportant aux ouvriers occupés dans les industries minières et manufacturières, y compris le bâtiment et la construction, devraient fournir des données séparées pour chacune des professions principales dans chaque industrie.

(2) Ces statistiques devraient:

- a) indiquer le nombre d'ouvriers groupés d'après le montant de leur salaire;
- b) être données par sexe et par catégorie d'âge.

2. (1) Des statistiques indiquant le montant global des salaires payés par année dans chacune des principales industries minières et manufacturières, y compris le bâtiment et la construction, devraient être compilées régulièrement et, si possible, à intervalles annuels.

(2) Une indication approximative devrait être donnée quant à la mesure dans laquelle ces relevés sont représentatifs pour l'ensemble des personnes employées.

3. (1) Des statistiques indiquant les salaires moyens annuels des ouvriers occupés dans chacune des principales industries minières et manufacturières, y compris le bâtiment et la construction, devraient être compilées à intervalles ne dépassant pas trois ans.

4. The statistics of time rates of wages should so far as possible be accompanied by:

- (a) indications as to the number of workers covered, and
- (b) any information which may be available as to the relation between the time rates of wages and actual earnings.

5. The statistics compiled in pursuance of this Recommendation should be published and communicated to the International Labour Office as prescribed by the Statistics of Wages and Hours Convention for the statistics compiled in pursuance thereof.

4. Les statistiques des taux des salaires au temps devraient, autant que possible, être accompagnées:

- a) d'indications sur le nombre des ouvriers considérés,
- b) de toutes informations disponibles sur la relation existant entre les taux de salaire au temps et les gains.

5. Les statistiques compilées conformément à la présente Recommandation devraient être publiées et communiquées au Bureau international du Travail conformément aux dispositions de la Convention sur les statistiques de salaires et des heures de travail relatives aux statistiques compilées en application de cette dernière.
